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# The Rosetta Stone in Historical Perspective

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The history of modern, scientific archaeology is little more than a century old. Before 1890, western interest in the ancient Near East was basically a hunt for treasures to stock the great national museums of Europe.<sup>1</sup> This interest in antiquities began to develop into a disciplined, enlightened effort thanks to the work of Sir William Flinders Petrie. This was particularly true for Syro-Palestinian archaeology. We mark his brief encounter with Tell el-Hesi, not far from Gaza, in 1890, as the stellar point. It was in the publication of that six week long excavation that he presented the principles that permeated his work: dig-ging according to the stratigraphy and dating according to typology.<sup>2</sup>

The application and refinement of those principles have continued to define modern archaeology to this very day. During and since Petrie's time (he died in Jerusalem in 1940), a vast number of excavations throughout the Middle East have recovered a tremendous volume of objects, including those bearing writing from the dim past of the biblical world. But some of the most significant finds were accidental rather than methodically recovered in excavations. A primary example that comes to mind was the discovery of the scrolls recovered from the caves near Khirbet Qumran by Bedouin shepherds in 1947. Today we are recalling an equally significant discovery made not a half-century but two centuries ago—the discovery of the Rosetta Stone.

The Rosetta Stone is an 11 inch thick slab of black basalt about 3 ft. 9 in. tall and 2 ft. 4.5 in. wide. In its original form it was apparently rectangular, per-

<sup>&</sup>lt;sup>1</sup>In 1656 John Tradescant published a description of "a collection of rarities, preserved at South Lambeth, near London" under the title: *Museum Tradescantianum*. In the course of time the collection came into the possession of Elias Ashmole, and he presented it to Oxford University in 1683. This was the beginning of the Ashmolean, which has been claimed to be the world's first public museum. The Louvre, a palace constructed from 1546, became the National Art Gallery in 1793, in the midst of the French Revolution. The British Museum was granted a royal foundation charter in 1753.

<sup>&</sup>lt;sup>2</sup>Published as *Tell el Hesy (Lachish)* in 1891.

haps with a rounded top.<sup>3</sup> When it was found the top corners and the bottom right corner were missing. A careful search for the missing pieces at the time of discovery proved fruitless, probably because the damage occurred prior to the transfer of the stone into secondary use where it was found.

#### **The Discovery**

The Rosetta Stone was discovered by chance in August,<sup>4</sup> 1799, near the town of Rosetta (Rashid) in the western delta of Egypt. Rosetta is located some thirty miles (48 km.) northeast of Alexandria; Cairo lies slightly more than one hundred miles to the south. The town gives its name to one of the major mouths of the Nile River as it empties into the Mediterranean Sea a few miles from the site of discovery. (The channel is also known as the Bolbinitic branch of the Nile.) The Rosetta mouth lies to the west of the second main mouth, the Damietta.

The discovery was remarkable because the stone was inscribed in two languages—Greek and Egyptian—written in three scripts, hieroglyphic, demotic, and Greek. It was to be the key to unlock the reading of the mysterious writing of ancient Egypt, knowledge that had slipped into oblivion over a millennium earlier. But that is enough about the discovery for the moment; we will return to it later. For now, let us hear the rest of the story, in order to appreciate the significance of the discovery.

#### The Demise of Ancient Egyptian Writing.

We celebrate the discovery of the Rosetta Stone and the subsequent decipherment of hieroglyphics because human ability to read the ancient script had been lost. This was a part of the demise of the glory that once was Egypt, a process that was long and drawn out. During most of the biblical period we call Iron Age II, spanning the period after Solomon's death and through the divided kingdom era, Egypt was experiencing the Third Intermediate Period (ca. 1085–664 B.C.). Dynasties 21 through 25 were ruled by non-Egyptian pharaohs—particularly Libyan (including Sheshonq I) and Sudanese.<sup>5</sup> It was in this era that the demotic form of Egyptian writing developed from the hieratic. This abbreviated and cursive form of writing was used for the needs of daily life.

Dynasty 26 (664–525 B.C.), the Saite dynasty, saw a restoration of rule to Egyptians, including Pharaoh Necho II. But Assyrian domination was a part of

<sup>&</sup>lt;sup>3</sup>Cf. Budge, *The Rosetta Stone*, 35. Rounded tops with sculptured reliefs have been found on the tops of stelae dedicated to Ptolemy II, Ptolemy III, and Ptolemy IV. Budge's translation of the Greek inscription appears at the end of this paper.

<sup>&</sup>lt;sup>4</sup>Some sources date the discovery in July (e.g., Carol Andrews, *The British Museum Book of The Rosetta Stone*, 12, puts the discovery in "mid-July") while others date it to August (so, no less an authority than E. A. Wallis Budge in *The Rosetta Stone*, 20: "There is no doubt that it was found in August, 1799...").

<sup>&</sup>lt;sup>5</sup>Cf. Hallo and Simpson, The Ancient Near East: A History, Ch. XII.

the times, and Egypt was but "a broken reed," to echo Isaiah 36:6. Necho was at least partially responsible for the death of King Josiah of Judah, shortly before the conquest of Nebuchadnezzar and the Babylonian Exile of the Judeans. With the Persian defeat of Babylon, Cambyses conquered Egypt and it became a satrapy of Persia. Persian domination did not signal the termination of Egyptian culture, but the influence of outsiders slowly eroded the dying culture. Greek influence and a Greek presence had existed in the delta region since at least the mid-sixth century B.C.<sup>6</sup>, but the arrival of Alexander the Great in 332 B.C. brought Egypt into the final phase of its ancient existence, and it is in the Graeco-Roman period that the arrival of Christianity ultimately snuffed out the ancient religious practices and the related knowledge of its writing system. Faint vestiges of demotic were to survive in the form of Coptic writing, but not enough to keep alive a memory of the ancient scripts.<sup>7</sup>

In Egypt, following the death of Alexander in Babylon in 323 B.C., the Macedonian general, Ptolemy of Lagos, became the ruler. Realizing the importance of maintaining an expedient relationship between his rule and the power of the Egyptian religious leaders, he and his successors were careful to cultivate the friendship of the all-powerful priesthood. As Cleator has noted, "To this end, rich endowments of grain and money were made to various temples, and others were restored and rebuilt; many new shrines and altars were founded; and enemies of the priests were suppressed. In these most favorable circumstances, it is hardly surprising that the accredited representatives of the high gods enthusiastically endorsed the rule of the intruders, whom they proceeded to deify in accordance with time-honored practice."<sup>8</sup> And thereby we find our connection to the Rosetta Stone. Following earlier Ptolemaic exemplars, the Egyptian priests decreed Ptolemy V a god on the occasion of his coronation on March 27, 196 B.C., and the decree was engraved on what we now know as the Rosetta Stone, likely for permanent display in a nearby temple.<sup>9</sup>

As far as we know, the last hieroglyphic inscription was cut into stone on a temple at Philae in A.D. 394. This was just a decade after the Byzantine emperor, Theodosius I (A.D. 379–95), issued an edict establishing Christianity as the religion of the empire and closing the temples dedicated to the old gods, and with them went the associated scribal schools. Ancient Egyptian writing was dead.

<sup>&</sup>lt;sup>6</sup>Cf. Hallo and Simpson, 292; cf. Discovering Ancient Egypt, 171.

<sup>&</sup>lt;sup>7</sup>Coptic consists of the Greek alphabet plus seven characters derived from the demotic script to represent sounds in the contemporary Egyptian language but not in the Greek, Coptic is a fossil language used for chanting and praying in Coptic services. Everyday use of the language gave way to Arabic in the 16<sup>th</sup> century. Its linguistic and literary study among scholars can be traced to the pioneering work of Athanasius Kircher in A.D. 1636.

<sup>&</sup>lt;sup>8</sup>P. E. Cleator, *Lost Languages*, 31.

<sup>&</sup>lt;sup>9</sup>Champollion thought the temple stood in Bolbitine, a town in the area no longer in existence but referred to in Gk. sources (cf. Budge, 20).

# The Enigma of Egyptian Hieroglyphs Before the 19<sup>th</sup> Century

Both the Greeks and the Romans were fascinated by the ancient and esoteric culture of Egypt. Among those who traveled to and left a record of their observations was "the father of history," Herodotus of Halicarnassus (c. 490–430 B.C.). He visited Egypt c. 450, when the Persians ruled. In the midfirst century B.C., Diodorus Siculus was in Egypt. The first of his twelve volumes of *Universal History* was devoted to Egypt, but he also depended upon the accounts of other visitors from earlier times, particularly Herodotus.

Manetho, an Egyptian priest, wrote his *Aegyptiaca* (History of Egypt) in Greek during the reign of Ptolemy II Philadelphus (283–246 B.C.), the same ruler who enabled the translation of the Pentateuch into Greek. Only fragments of Manetho's work survived in the writings of Flavius Josephus, Sextus Africanus, Eusebius (A.D. 320), and George called Syncellus (ca. A.D. 880). Manetho's chronology of the pharaonic dynasties was destined to assist Champollion in his decipherment of Egyptian royal names.<sup>10</sup>

Strabo, the famous Roman geographer, visited Egypt in 25 B.C. Of his seventeen books about the Roman world, the last gives an account of Egypt's geography, along with information on tombs, pyramids, temples, and religious and historical facts, focused mainly on Alexandria and the Delta. A century later, Pliny the Elder (A.D. 23–79) wrote his *Historia Naturalis*. He provides an early reference to the Sphinx at Giza as well as to Egyptian obelisks erected in Rome. He, Herodotus, and Diodorus also described the peculiar Egyptian custom of mummification. Another famous classical writer was Flavius Josephus. We cannot be certain that he ever visited Egypt, although it is unlikely; nevertheless, he was an important resource used by European intellectuals inquisitive about matters Egyptian during the Renaissance. These classical authors provide a unique view of Egypt and, despite their shortcomings, they remained the most reliable source for ancient Egypt until the decipherment of hieroglyphs ushered in the modern age of Egyptology.

The Greeks and the Romans were deeply moved by the evident wisdom of ancient Egypt, seen in the grandeur of its monuments. And they were impressed by the mysterious picture-writing of Egypt, which they believed contained within its symbols secret mysteries and profound truths. Despite this interest, we know of no Greek who could read hieroglyphics.

As my colleague Michael V. Fox has noted,

The Greeks . . . were fascinated by hieroglyphics, though they didn't bother to learn them, or even to learn what they really were. For they were quite sure that they knew what the hieroglyphics were, namely symbolical or allegorical writing. . . . Plotinus ( $3^{rd}$  c. A.D.), the founder of Neo-Platonism, gave a tremendous boost to this notion of hieroglyphics, a boost that carried it right through the Middle Ages and Renaissance to the  $19^{th}$  century. The Neoplatonists had no

<sup>&</sup>lt;sup>10</sup>Discovering Ancient Egypt, 13f.

interest in discursive reasoning. They wanted to get right to the heart of knowledge by direct experience of the truth itself. Plotinus thought that the Egyptians had acquired a way of writing with pictures which were not merely representations [of language] but were endowed with symbolic qualities by means of which they revealed to the initiated—the very essence and substance of things. The Neoplatonists saw the hieroglyphs as sermons in stones, in the most literal sense of the expression.<sup>11</sup>

And there was some truth to this: "[In its final stages] . . . the language itself had become almost incredibly convoluted, abstruse and deliberately crypto-graphic."<sup>12</sup> As Jan Assmann observes,

Until the Late Period, cryptography is a very rare variant of hieroglyphic, used predominantly for aesthetic purposes, to arouse the curiosity of passers-by. But in the Greco-Roman period, an age of foreign domination, the methods of cryptography were integrated into the monumental script of hieroglyphics; this created enormous complexity and turned the whole writing system into a kind of cryptography.<sup>13</sup>

The combination of Egyptian scribal cryptography and Neo-platonist inclinations was destined to be a stumbling block through many generations of those who sought to understand the wisdom of ancient Egypt.

Following Plotinus, near the close of the fourth century A.D., Horapollo wrote in the Egyptian language (probably Coptic) a two-part treatise on the hieroglyphs. This was translated into Greek by someone named Philippus. A traveler, Buondelmonte, discovered the book for Europeans on the Aegean island of Andros in 1419.<sup>14</sup> Budge characterizes Horapollo's "Hieroglyphika" thus:

The first book contains evidence that the writer had a good knowledge of the meanings and uses of Egyptian hieroglyphs, and that he was familiar with inscriptions of the Ptolemaic and Graeco-Roman periods. In the second book there are many absurd and fanciful statements about the meanings and significations of Egyptian hieroglyphs, and these are probably the work of the unknown PHILIPPUS, who [...] was ignorant of the phonetic values of the characters he described.<sup>15</sup>

*Hieroglyphika* was destined to have a long and profound effect on western ideas about Egyptian thought and writing, an effect that continued in some circles even after the decipherment of the ancient system of writing. Rather than relating the signs to phonetics, the book related them to ideas, for example:

To indicate a man who has never travelled they paint a man with a donkey's head.

<sup>&</sup>lt;sup>11</sup>Unpublished lecture, "The Rise and Fall of Egyptian Hieroglyphs"; my thanks to Prof. Fox for these observations.

<sup>&</sup>lt;sup>12</sup>John Anthony West, The Traveler's Key to Ancient Egypt, 26.

<sup>&</sup>lt;sup>13</sup>Moses the Egyptian, 108.

<sup>&</sup>lt;sup>14</sup>*The Story of Archaeological Decipherment*, 11.

<sup>&</sup>lt;sup>15</sup>The Rosetta Stone, 181. For the Gk. text with English trans., Budge directs his readers to A. T. Cory, *The Hieroglyphics of Horapollo Nilous*, London, 1840.

For he never knows or listens to accounts of what happens abroad. They paint a hand to show a man who is fond of building. For the hand is what carries out work.<sup>16</sup>

Likewise, a crocodile represented evil; a hare indicates what is open, because the hare always has its eyes open. The eye signifies a god or divine justice, that is, the ever and all-seeing eye. However, a hawk could also represent a god, because the hawk is fecund or long-lived, or it symbolized the sun, because it excels all other birds in sharpness of sight, because of the rays of its eyes. A fish shows the lawless or the abominable, because its flesh is hated and an object of disgust in the temples. For every fish is a purgative, and they eat each other. On the other hand, the vulture is used to indicate motherhood, because alone of all the animals there is no male vulture, but when the female would generate, she opens her vulva to the wind and is impregnated by the north wind.<sup>17</sup>

Such was the legacy of the classical world in this respect, largely lost until its rediscovery in the 15<sup>th</sup>, 16<sup>th</sup>, and 17<sup>th</sup> centuries. However, between the 5<sup>th</sup> and the 15<sup>th</sup> centuries, a long hiatus in interest in ancient Egypt ensued, largely due to the pervasive influence of Christianity. Early on the spread of Christian culture in the Byzantine period affected the view of Egypt's past. Egypt represented the pagan past. The ancient monuments were often disdained and sometimes defaced. When noted, they were interpreted in terms of biblical events. Then came the Arab conquest in the 7<sup>th</sup> century A.D. This aroused no interest in the remnants of ancient Egypt among the conquerors. By this time, too, the native population had very little memory of that long-departed civilization, and none of them could read the hieroglyphs. The Islamic conquerors had their own agenda and were little interested in the ancient monuments which, because of their massive concept and scale, they believed had been constructed by giants or magicians.

Few Europeans traveled to Egypt in the centuries before the Crusades. An occasional non-Muslim traveler did visit Egypt, however, and particularly note-worthy was Benjamin ben Jonah of Tudela in Navarre, who made the journey in A.D. 1165–71. He was the first to note that the annual flood of the Nile was due to the rains that fell on the mountains of Abyssinia. There was also a Muslim doctor from Baghdad—Abd'el-Latif—who taught medicine and philosophy in Cairo and who visited the pyramids of Giza and the Sphinx. His account, however, had no influence on later European investigations because it was not translated from the Arabic until the early 19<sup>th</sup> century.<sup>18</sup>

The Renaissance turned intellectual attention to classical Rome and Greece, and also to the even more ancient wisdom of Egypt, just as classical antiquity had held that wisdom in awe. As Pope has noted,

<sup>&</sup>lt;sup>16</sup>The Story of Archaeological Decipherment, 18–19.

<sup>&</sup>lt;sup>17</sup>Drawn from illustrations from Fox.

<sup>&</sup>lt;sup>18</sup>Discovering Ancient Egypt, 15.

This great confidence in the virtues of Egyptian writing existed despite the fact that scarcely anybody had ever seen any. Cyriac of Ancona had brought back from Egypt one or two drawings. There were a few inscribed fragments of obelisks lying partly visible in back quarters of Rome; that was the sum of what was available. Nevertheless, imagination could supply the deficiency, and it did. The first pseudo-hieroglyphs to be printed and published were the modern ones of Francesco Colonna, a learned, allegorical novelist .... <sup>19</sup>

Colonna's *Hypnerotomachia Poliphili* (1499) included pseudo-hieroglyphs such as those in a circular medallion, divided vertically by a staff on which two serpents are intertwined. In the upper half on either side, two elephant posteriors are expanding from small objects; on the lower half on either side, two fore-halves of elephants are descending into small objects. On the left side is a censor with burning fire; on the right side is a basin of tranquil water. The whole is to be interpreted: "Concord makes little things big; discord makes great things small."<sup>20</sup> Such an exercise was possible because hieroglyphs were thought of as symbols of wisdom to be understood allegorically rather than as elements of language.

Pierius Valerians, Apostolic Prothonotary to Pope Clement VII, published in 1556 a comprehensive study entitled The Hieroglyphs, or a Commentary on the sacred letters of the Egyptians and other peoples. He wrote the equivalent of fifty-eight chapters on the subject. The first thirty-one dealt with animals; the remainder treated parts of the human body, man-made artifacts, and plants. In the 1561 edition, one of his self-made hieroglyphs is of a stork head attached to a bovine lower-leg and hoof. Its meaning: Impietati praelata Pietas, that is, "Devotion over Selfishness."<sup>21</sup> Others followed this pattern of creating hieroglyphs never seen by an Egyptian eye.. The interest in hieroglyphs had one positive result. A number of obelisks that had been brought to Rome and erected in the days of the empire had fallen and lain in disuse, partially obscured by accumulated dirt and debris. As Pope reports, "Between 1582 and 1589 no less than six obelisks were either re-sited or put up again for the first time since antiquity. One important consequence was that in future engravings of obelisks, hieroglyphic inscriptions had to be very much more accurate."22 And the interest in hieroglyphs continued, but unfortunately dominated by the view that they inherently held "abstract moral and philosophical ideas of pronounced significance"23 rather than specific language. Nicolao Caussin wrote a work on Egyptian wisdom in the early 17<sup>th</sup> century in which he defined a hieroglyph as "an image or figure arbitrarily agreed on by men to express a particular meaning,

<sup>&</sup>lt;sup>19</sup>The Story of Archaeological Decipherment, 23.

<sup>&</sup>lt;sup>20</sup>After Fox.

<sup>&</sup>lt;sup>21</sup>The Story of Archaeological Decipherment, 27, fig. 13.

<sup>&</sup>lt;sup>22</sup>Ibid.

<sup>&</sup>lt;sup>23</sup>C. Aldred, The Egyptians, 15.

which was employed by the philosophers of Egypt instead of letters."<sup>24</sup> A Jesuit priest, Athanasius Kircher, is remembered for his work on the Coptic language, but he published voluminously about hieroglyphs following the presuppositions of his predecessors<sup>25</sup>

The end of the Crusades had sparked a renewed European interest in the Near East, including Egypt, thanks to the accounts of returning Crusaders. Of even greater importance was the fall of Constantinople to the Turks in A.D. 1453, bringing to the west an influx of Byzantine scholars, along with many manuscripts by classical Greek and Roman authors. The time was at hand for new ways of thinking embodied in the Renaissance.

Other influences were also at work. In 1517 the Turks gained control of Egypt. They signed treaties with France and Catalonia, permitting their traders to operate in Egypt and even providing religious protection. Increasing numbers of diplomats and merchants traveled to the Near East, followed by pilgrims to the holy sites and individuals inquisitive about ancient monuments. Greater freedom to travel was coupled with the intellectual ferment fostered by the Renaissance, and an interest in acquiring antiquities and curiosities developed among wealthy collectors. To this demand the Egyptian entrepreneurs enthusiastically responded.

One peculiar development in Europe was an interest in the presumed medical benefits of powdered mummies! In the 16<sup>th</sup> and 17<sup>th</sup> centuries, it was one of the most common ingredients found in the shops of European apothecaries. And in 1658 the philosopher Sir Thomas Browne commented, "Mummy is become Merchandise, Mizraim cures wounds, and Pharaoh is sold for Balsams."<sup>26</sup> But the use of mummy as a medicinal ingredient seems to have occurred as early as A.D. 1100.

The international trade in *mumia* flourished, with Alexandria as the main export center. Complete mummies and packages of mummy tissue were shipped, and soon demand exceeded supply. In 1834 the surgeon Thomas Petti-grew wrote, in his *History of Mummies*, "No sooner was it credited that mummy constituted an article of value in the practice of medicine than many speculators embarked in the trade; the tombs were sacked, and as many mummies as could be obtained were broken into pieces for the purpose of sale."<sup>27</sup>

The Egyptian authorities had to curb the export of mummies, but this only exacerbated the problem of supply, and that led to fraud. Pettigrew explains how

<sup>&</sup>lt;sup>24</sup>See *The Story of Archaeological Decipherment*, note 16, 193. Caussin's *de symbolica Aegyptiorum sapientia* was published in Cologne in 1631.

<sup>&</sup>lt;sup>25</sup>Prodomus Coptus sive Aegyptiacus, Rome, 1636; Lingua Aegyptiaca restituta, Rome, 1643; Obeliscus Pamphilius, Rome, 1650; Oedipus Aegyptiacus, Rome, 1652–54; Polygraphia nova et universalis, Rome, 1663; Obelisci Aegyptiaci nuper inter Isaei Romani rudera effossi interpretatio hieroglyphica, Rome, 1666 (after The Story of Archaeological Decipherment, 208.

<sup>&</sup>lt;sup>26</sup>Rosalie, *Discovering Ancient Egypt*, 16.

<sup>&</sup>lt;sup>27</sup>Op. cit.

Guy de la Fonteine of Navarre investigated the mummy trade in Alexandria in 1564. When he looked into the stock of mummies held by the chief dealer there, he found that the supply was augmented by preparing the bodies of the recently dead, often executed criminals, by treating them with bitumen and drying them in the sun to produce mummified tissue which was then sold as genuine *mumia*. Later in the 18<sup>th</sup> century, when the nature of such supplies was eventually revealed to authorities, traders were imprisoned, a tax was levied, and it became illegal to export mummies from Egypt.<sup>28</sup>

As David notes, "The actual benefits of the ingredient were disputed. On the one hand, it was used to treat amongst other ailments, abscesses, fractures, concussion, paralysis, epilepsy, coughs, nausea and ulcers. It also received royal approval when King Francis I of France reputedly always carried with him some *mumia* mixed with pulverized rhubarb to treat his ailments. However, according to the physician Ambrose Paré, writing in 1634, it had no beneficial effects: 'This wicked kinde of drugge, doth nothing help the diseased . . . it also inferres many troublesome symptomes, as the paine of the heart or stomake, vomiting, and stinke of the mouth.' The strict measures introduced to curb the mummy trade did in fact reduce the worst excesses, but the ingredient continued to be in demand, and was still in use in medicines in 19<sup>th</sup> century Europe.<sup>29</sup>

The flow of travelers to the Near East and to Egypt engendered another form of trade which we mentioned above. Some travelers began to realize that Egyptian antiquities could be sold to wealthy patrons in Europe at great profit. Among those hungering for acquisitions were nobility and royalty, none more enthusiastically than the Kings of France. Embassies and consulates began to engage in duties other than diplomatic, using local agents to seek out attractive antiquities. Gradually, foreign collectors also sought permission from the Turkish rulers in Egypt to carry out their own excavations, in order to acquire and remove inscriptions, statuary and tomb goods. This in turn led to international jealousy and rivalry between the different factions who were all anxious to supply the most desirable antiquities for their wealthy clients. In time some of the great private collections would become the foundation for national collections to be housed in the Louvre in Paris, the British Museum in London, etc.

By 1798, when Napoleon Bonaparte went to Egypt in search of an empire, the foundations for the study of Egyptology had already been laid: the extensive journeys throughout the country had enabled travelers to discover all the principal monuments above ground, and in many cases these were already accurately identified with ancient sites. Some excavation had also been carried out, revealing burials at Sakkara and Thebes. The rush to obtain antiquities for great collections abroad had already led to the destruction of monuments and archaeological material, but there were now extensive groups of objects outside Egypt

<sup>&</sup>lt;sup>28</sup>Op. cit.

<sup>&</sup>lt;sup>29</sup>Op., cit., 16-17.

which could be studied by scholars. Interesting and increasingly accurate contemporary accounts of journeys also were being written, and these augmented the Classical sources and replaced the older, derivative travel books.

I have attempted to trace briefly the history of interest in and knowledge of ancient Egypt and its hieroglyphs prior to the discovery of the Rosetta Stone and subsequent developments. I want to add the observations of John A. Wilson:

Contrast changes in Europe and the US, where the Industrial Revolution and the American and French revolutions meant irrepressible change, and Egypt, still steeped in the atmosphere of the Middle Ages. A nominal dependency of the Turkish Sultan, but ruled with arrogant brutality by foreign mercenaries, the Mamelukes, Egypt was caught in the torpor of the times and was of little interest to either Europeans or Americans. Any knowledge about Egypt was based on the Bible and the classical authors, supplemented by a few fantastic books of travel. Ideas about Egypt had a large factor of the preposterous. The fertile mud of the Nile after the annual inundation was thought to produce life spontaneously. Said Lepidus in Shakespeare's *Antony and Cleopatra*, "Your serpent of Egypt is bred now of your mud by the operation of your sun. So is your croco-dile." Dried and pulverized mummy was believed to be an effective drug in medicine. . . . And European painters in oils used a pigment called "mummy," made of bitumen and animal remains from Egyptian tombs, because it was reputed not to crack on the canvas.

Equally fantastic were the ideas of the Europeans about the Egyptian hieroglyphs. Generally speaking, ancient Egypt was both remote and incomprehensible; by definition, hieroglyphic was priestly carving, and priests are always suspected of cabalistic mysteries. Therefore, the hieroglyphs must be supercharged with secret symbolism; they could not be read as a Westerner might read Arabic or Chinese. About 1762 a distinguished British physician, William Stukeley, the Secretary of the Society of Antiquaries, wrote:

The hieroglyphics of the Egyptians is a sacred character; that of the Chinese is civil or a common way of writing.... The characters cut on Egyptian monuments, are purely symbolical. They are nothing than hymns & invocations to the deity.... To give a few instances. A feather so often appearing, signify's sublime. An eye is providence.... A boat, the orderly conduct of providence in the government of the world. A pomegranate imports fecundity, from the multitude of its seeds.... I believe the true knoledg of the hieroglyphics was immersed in extremest antiquity. So that if any skill of interpreting them, remain'd with the priests, to the time of *Cambyses*; after that time, the just understanding of them was lost.... The perfect knoledg of 'em is irrecoverable, with the most antient preists [*sic*]

With such an attitude of mind among literate people, it is not surprising that there was no initiative to find the key to hieroglyphic and that the scholarly world was slow to accept Champollion's decipherment in 1822.<sup>30</sup>

Wilson paints the picture a little too black, however. There were a few rational thinkers who were questioning the received view of the meaning of hiero-

<sup>&</sup>lt;sup>30</sup>Signs and Wonders Upon Pharaoh, 10-11.

glyphs even before the discovery of the Rosetta Stone. As Cyril Aldred has noted, "The history of Egyptology in Europe ... [was] an attempt to interpret hieroglyphic writing according to the esoteric Neoplatonist ideas, and the gradual emergence of a school of skeptics during the Age of Reason with a more rational attitude to the subject. In this long progression from mysticism to intellectual conprehension many scholars made small but significant contributions, notably Warburton and Young in Britain; Zoëga and Niebuhr in Denmark; Montfaucon, Barthelemy, and Silvestre de Sacy in France; and Akerblad in Sweden. By the end of the 18<sup>th</sup> century, Egyptian studies were ready to take a new direction."<sup>31</sup> We will comment further on the contributions of some of these scholars below.

#### The French Expedition to Egypt

To return to the discovery, the historical context is of interest. The French were in Egypt in 1799 because of Napoleon Bonaparte. Though a Corsican by birth, he had risen to prominence in the French army as commander in chief of the army of Italy in 1796–97. The historian James Harvey Robinson described Napoleon in these telling phrases: "little" (5' 2"), "thin," with a "quick, searching eye ... abrupt, animated gestures ... and rapid speech" ... "a dreamer" but one whose "practical skill and mastery of detail amounted to genius." Further, "He was utterly unscrupulous" ... and "without any sense of moral responsibility," personal characteristics to which were added "unrivaled military genius" wedded to "the power of intense and almost continuous work."<sup>32</sup> In 1797 he was appointed by the five-member Directory of the Legislative Body (in whom the executive powers of France were then situated) to command forces for a projected invasion of England, the major enemy of France at the time. However, Napoleon then convinced the Directory that the best way to ultimately devastate the English was to capture Egypt and destroy England's commercial traffic through the Mediterranean and undermine her dominance in the East.<sup>33</sup>

The French fleet and army arrived in Alexandria on July 1, 1798, and along with them were one hundred sixty-seven scholars who were to explore, describe, and even excavate the antiquities of ancient Egypt. Napoleon himself carried with him but one book on Egypt—Constantin François Volney's *Letters Written from Egypt*, published in 1787.<sup>34</sup>

The French armed forces easily defeated the Turkish army and occupied Alexandria. This success was soon followed by a victory in the Battle of the Pyramids near Cairo. However, in August 1798, British Admiral Nelson discovered the French fleet in Alexandria's harbor and destroyed it, leaving Napo-

 $<sup>^{31}</sup>$ The Egyptians, 16–17.

<sup>&</sup>lt;sup>32</sup>An Introduction to the History of Western Europe, New Edition (New York: Ginn and Co., 1934), 273–74.

<sup>&</sup>lt;sup>33</sup>Robinson, op. cit..

<sup>&</sup>lt;sup>34</sup>J. Vercoutter, *The Search for Ancient Egypt*, 39.

leon's troops stranded in Egypt. The Ottoman Turks declared war on France, and Napoleon determined to attack Turkey by moving north from Egypt through Palestine and Syria; but at Acre the Turkish forces and the English fleet repulsed his troops, and he was forced to withdraw. He again reached Cairo in June, 1799. By the time the Rosetta Stone was discovered in August, Napoleon had heard that Great Britain, Russia, Austria, Turkey and Naples had joined forces and were about to invade France. So he secretly left his troops in Egypt and returned overland to Paris. Such was the political context of Europe and the Middle East when the Rosetta Stone was discovered.<sup>35</sup>

Earlier we mentioned the discovery of the Rosetta Stone; some additional details are of interest. The stone was found by French soldiers at Fort St. Julian as they were tearing down a ruined wall in preparation for extending the foundations to enlarge the fort. The officer in charge of the demolition was Lt. Pierre François Xavier Bouchard. (In my opinion we ought to at the least note him in passing, just as we ought never forget that an inquisitive Arab shepherd boy named Muhammad edh-Dhib discovered the scrolls from Cave One near Qumran.) The soldiers recognized almost immediately the importance of the three texts, and General Menou arranged to have a part of the Greek text translated almost at once in order to determine the nature of the contents. Bouchard and his officer companions noted that parts of the stele were broken off and missing, so they examined the rest of the wall carefully in hopes that they would recover the missing fragments—to no avail. So they packaged the stone and shipped it to Cairo. The French scholars were lodged there in a palace assigned to them by Napoleon. Along with the inscribed stone came an explanatory note of the discovery. The scholars named it the "Rosetta Stone," in honor of the place in which it was found. News of the discovery reached France in September.

Today, if one desires to personally gaze upon the Rosetta Stone, one travels to London—to the British Museum—rather than to Paris and the Louvre, and therein lies another part of our story. The French army continued to hold Egypt after Napoleon's departure for France, that is until coordinated Turkish and British troops forced the French to surrender at Alexandria in September 1801. As a part of the capitulation, the French scholars were required to turn over to the British all their treasures. The French protested vigorously, and the general of the French forces even claimed the Rosetta Stone was his personal property. The British were informed that the material was written in a dead language, that neither British soldiers nor scientists could understand the inscription without the assistance of the French scholars. Ultimately the British relented and left the

<sup>&</sup>lt;sup>35</sup>By means of a coup d'etat, Napoleon became the head of the French government; on Dec. 2, 1804, he was crowned in the Cathedral of Notre Dame as Napoleon I, Emperor of France. His rule finally ended with his banishment to St. Helena in 1815.

bulk of the material with the French; however, they insisted on taking the Rosetta Stone.<sup>36</sup>

The stone itself arrived in England in 1802. King George III ordered that it be placed in the British Museum and copies of the writing on the stone made available to interested English scholars. The astute French, however, had previously made several paper copies of the inscription by coating it with printer's ink and impressing papers on it. So these ink impressions became the basis of the study of the inscription in France and Europe.

#### The Decipherment of Hieroglyphics

It is an historical given that Jean François Champollion is credited with deciphering Egyptian hieroglyphs, but he did not accomplish this in isolation. We have already noted above that Athanasius Kircher had made initial contributions to the study of Coptic early in the 17<sup>th</sup> century, no matter his failure with hieroglyphs. The recovery of the Coptic language and the study of Coptic manuscripts led to the realization that several signs in the alphabetic system derived ultimately from the hieratic script. But more important was the realization that Coptic was Egyptian. "Without [the recognition that ancient Egyptian was linguistic] Champollion's decipherment would certainly not have taken place as it did. Indeed it is possible, perhaps probable, that ancient Egyptian would have remained permanently obscure."37 In 1668, John Wilkins published An Essay towards a Real Character and a Philosophical Language, attempting to construct a universal writing system. While generally unsuccessful, it became clear from his work that it was extremely difficult if not impossible to write foreign proper names in an ideographic script, knowledge that would in time benefit Champollion's work. The Danish scholar Georg Zoëga perceived and argued that "the order of hieroglyphs in a hieroglyphic text must be linguistically determined, a conclusion which was to have a conscious effect on Champollion."<sup>38</sup> Carsten Niebuhr, also a Danish scholar, established new standards of accuracy for copying hieroglyphs and also developed a table of hieroglyphs based on accurate criteria which helped to quantify the total number of signs. His 1744 Reisebeschreibung nach Arabien und andern umliegenden Ländern was translated into English in 1792.<sup>39</sup> William Warburton (1698–1779) insisted that Egyptian hieroglyphic writing developed in the normal course of human progress as "the second mode of invention for recording men's actions and conceptions; not, as has been hitherto thought, a devise of choice for secrecy, but an expedient of

<sup>&</sup>lt;sup>36</sup>James Cross Giblin, *The Riddle of the Rosetta Stone* (New York: Crowell, 1990), 29.
<sup>37</sup>The Story of Archaeological Decipherment, 39.

<sup>&</sup>lt;sup>38</sup>Ibid., 42. Zoëga wrote his *De origine et usu obeliscorum* under the patronage of Pope Pius

VI. The most complete and reasonable survey of Egyptology to his time, it appeared in print in 1797. <sup>39</sup>Ibid., 54, 209.

necessity, for popular use."<sup>40</sup> Champollion considered him to be the first sensible man to have tackled the subject.<sup>41</sup>

Interestingly, Warburton wrote his study to refute the views of free-thinkers and Freemasons, but they turned his convoluted thinking to their advantage.

The idea that pagan religions developed and degenerated around a nucleus of original wisdom which they enshrined and sheltered in a complex and enigmatic architecture of hieroglyphics and ceremonies and which in the course of time became more and more antithetic to their public political institutions had special appeal in the Age of Enlightenment, when the most advanced ideas were communicated within the esoteric circles of secret communities.<sup>42</sup>

The Abbé Barthélemy built on a theory of Warburton that some of the hieroglyphic signs were borrowed by an alphabetic system. Of course it was not an alphabetic system, but Barthélemy suggested (1762) that cartouches on obelisks might contain the names of kings or gods.<sup>43</sup> This was to be a crucial component in the ultimate decipherment of hieroglyphics. Silvestre de Sacy (1758–1838) was Professor of Arabic at the School of Living Oriental Languages in Paris, and Champollion studied under him. In 1802 he outlined a line of attack for deciphering the Egyptian of the Rosetta Stone, focusing on the demotic rather than the hieroglyphic. He made a number of important observations but was ultimately unsuccessful in his attempts.<sup>44</sup>

Johan David Akerblad was a Swedish diplomat and orientalist. Sacy had sent him a pre-publication copy of the inscription, and he began working on the demotic text. He identified the name Ptolemeios as well as several others and proved that the names were written with signs representing sounds. He identified about 29 letters, about half of which were correct. But he was stymied by two unfounded assumptions. He incorrectly believed that all of the demotic signs represented sounds, and he thought the hieroglyphic text was totally symbolic writing, which it was not.<sup>45</sup> He published his results in a letter to Sacy in 1802.

Dr. Thomas Young of Great Britain obtained a copy of the inscription in 1814. He was an extraordinary individual, having learned to read before he was two, and by age twenty he had mastered a dozen foreign languages, including Arabic, Persian, and Turkish. An inheritance from an uncle left him free to pursue his scientific interests. Among other pursuits, he had studied the habits of spiders, the surface features of the moon, and respiratory diseases. He is best remembered for developing the wave-theory of light. In 1814–15 the decipherment of the Rosetta Stone became his obsession. He was aware of the work of

<sup>&</sup>lt;sup>40</sup>Ibid., 49, 210.

<sup>&</sup>lt;sup>41</sup>Ibid., 46.

<sup>&</sup>lt;sup>42</sup>Moses the Egyptian, 102.

<sup>&</sup>lt;sup>43</sup>The Story of Archaeological Decipherment, 53.

<sup>&</sup>lt;sup>44</sup>Op. cit., 63, 209.

<sup>&</sup>lt;sup>45</sup>Op. cit., 64.

de Sacy and Akerblad and determined to succeed where they had failed. He first worked with the demotic section, comparing it with the Greek. He noted that the word "king," or "pharaoh," occurred thirty-seven times in the Greek, and he worked at matching a group of demotic signs that occurred about thirty times. Also, the name "Ptolemy" appeared eleven times in the Greek version, and he associated the name with a group of demotic characters that appeared fourteen times, and each time they appeared they were set off by lines that looked like parentheses. He guessed, correctly, that these lines were a simple form of the oval cartouches within which the royal names were written in hieroglyphs. But then he stumbled over an assumption, that in the hieroglyphs phonograms were used only for writing foreign names, not for genuine Egyptian words. The latter, he thought, were a form of symbol-writing. In a letter to Sacy he raised doubts against the accepted convention that hieroglyphic forms always were ideographic while demotic forms were always alphabetic. But having worked on the problem for a brief period, Young outlined his results in the 1819 edition of the Encyclopaedia Britannica, which provided important observations that Champollion would use.

He not only confirmed that the cartouches contained royal names, and proved that these began at the oval's rounded end, but he also showed the equivalence of the several forms of Egyptian script, established that the writing was to be read in the direction in which the characters faced, and demonstrated the all-important fact of its quasi-alphabetical nature. He was aware, too, that numerals were expressed by strokes, that plurals were formed either by repeating the appropriate hieroglyph three times, or by writing three strokes after it, and that different characters could on occasion have the same sound (principle of hemophony), while others (such as the two symbols used in late texts as an indication of feminitity) could be employed as determinatives."<sup>46</sup> Young then turned away from deciphering ancient Egyptian to other pursuits, even though he later attempted to lay claim to Champollion's achievement.<sup>47</sup>

Jean François Champollion (1790–1832) was an exceptional youth with an aptitude for languages and a consuming interest in all things Egyptian. By the age of nine he knew Latin and Greek well enough to read Homer and Vergil. By thirteen he had learned Hebrew, Arabic, Syriac, and Aramaic. In 1807 he was in Paris, where he spent two years studying Persian and particularly Coptic. And he dedicated himself to what he envisioned as his great work—deciphering hiero-glyphs.<sup>48</sup>

Prof. Michael V. Fox has succinctly summarized that accomplishment:

His path to the decipherment was painful and wracked with self-doubts.... [There were]... three main steps. First... he learned to convert demotic to hieratic and hieratic to hieroglyphs, showing that they were equivalent systems. Secondly, working with the name Ptolemy, he identified a number of other

<sup>&</sup>lt;sup>46</sup>Lost Languages, 45.

<sup>&</sup>lt;sup>47</sup>*The Story of Archaeological Decipherment*, 66–68.

<sup>&</sup>lt;sup>48</sup>The Search for Ancient Egypt, 90–94.

Greek names written alphabetically. He suspected, but was not himself convinced, that other words were also written with phonograms. Third, on September 14, 1822, he received an inscription with the name Ra-messes in a cartouche, which he knew indicated a royal name. He knew that the sun was Ra, and he knew [hieroglyph] to be 's' from "Ptolemeios." So he had Re-?-ss. He thought of Ramesses. On the Rosetta Stone, the [hieroglyph] sign was translated "born." This reminded him of Coptic *misi*, to give birth. That opened the gates, and further progress came in a flood. On September 27, 1822, he presented his discoveries to the Académie des Inscriptions et Belles-Lettres in a paper entitled *Lettre à M. Dacier relative à l'alphabet des hiéroglyphes phoné-tiques*.

Two years later he published his summary of the hieroglyphic system, and by his death in 1832 he could read Egyptian inscriptions amazingly well. He had rediscovered a lost world and opened it to modern science."<sup>49</sup>

Champollion was destined to die but a decade after his great accomplishment. During that time he was able to make an extended expedition to Egypt that resulted in gathering invaluable data published in his *Monuments of Egypt and Nubia* that appeared posthumously in 1845.

The rest, as they say, is history. Others followed and refined the work of Champollion so that today Egyptology is a vigorous academic discipline that continues to throw light not only on the world of the ancient Egyptians but also on its connections with ancient Israel. All this, thanks to the accidental discovery of the Rosetta Stone.

## The Rosetta Stone English Translation of the Greek Text<sup>50</sup>

[The Dating of the Decree]

- 1 In the reign of the Young [God], who hath received the sovereignty from his father, the Lord of Crowns, who is exceedingly glorious, who hath stablished Egypt firmly, who holdeth
- 2 in reverence the gods, who hath gained the mastery over his enemies, who hath made the life of man to follow its normal course, lord of the Thirty-year Festivals, like Hephaistos the Great, a King, like Helios,
- 3 great king of the Upper Country and of the Lower Country, offspring of the gods Philopatores, whom Hephaistos hath chosen, to whom Helios hath given the victory, the Living Image of Zeus, the son of Helios (Ra), Ptolemy,
- 4 the everliving, the beloved of Ptah In the IXth year, when Aetos, the son of Aetos, was priest of Alexander, and of the gods Soteres, and of the gods Adelphoi, and of the gods Euergetes, and of the gods Philopatores, and
- 5 the God Epiphanes Eucharistos; Pyrrha, daughter of Philinos, being the Athlophoros of Berenike Euergetes, and Areia, daughter of Diogenes, the Kanephoros of Arsinoe Philadelphos, and Eirene,
- 6 the daughter of Ptolemy, being priestess of Arsinoe Philopator; the IVth day of the month Xandikos, which corresponds to the XVIIIth day of the Egyptian month of Mekheir, the second month of the season Pert.

<sup>&</sup>lt;sup>49</sup>Fox, unpublished paper, 8.

<sup>&</sup>lt;sup>50</sup>The translation is by Sir E. A. Wallis Budge, *The Rosetta Stone*, 51–66, who also provides translations of the hieratic and hieroglyphic versions.

#### [Introduction to the Decree]

The High-priests, and the Prophets, and those who go into the shrine to dress

- 7 the gods, and the Bearers of Feathers, and the sacred Scribes, and all the other priests who have gathered themselves together from the temples throughout the country before the king in Memphis, for the commemorative festival of the reception of the
- 8 kingdom, by Ptolemy, the everliving, the beloved of Ptah, the god Epiphanes Eucharistos, which he received from his father, being assembled in the temple of [Ptah] in Memphis, on this day, declared [thus]:—

#### [Ptolemy V as Benefactor of the Temples of Egypt]

- 9 (1) "Inasmuch as King Ptolemy, the everliving, the beloved of Ptah, the God Epiphanes Eucharistos, the offspring of King Ptolemy (IV) and Queen Arsinoe, the Gods Philpatores, hath given many benefactions, both to the temples, and
- 10 to those that dwell therein, and to all those who are subject to his dominion, being a God born of a god and goddess—even like Horus, the son of Isis and Osiris, who avenged his father Osiris—;
- 11 (2) and towards the gods being full of benevolent piety, hath dedicated to the temples revenues in money and in grain;

(3) and hath incurred great expenses in order that he might bring Egypt into a state of prosperity, and might establish the temples;

- 12 (4) and hath given away freely of all the moneys which were his own; (5) and of the taxes and dues which come to him from Egypt, some he hath finally remitted, and others he hath reduced, so that the people (i.e., the native Egyptians) and all the others (i.e., foreigners domiciled in the country)
- 13 might be prosperous during his reign; (6) and hath remitted to the natives of Egypt and to all the other people (domiciled) in his kingdom, the debts which were due to the royal treasury and which were indeed very many in number; (7) and hath set free from the charges against them those who were in the prisons,
- 14 and who had been there for a long time because of the [non-settlement of their cases].
  [Ptolemy V Confirms the Revenues of the Temples, and Restores Their Former Revenues]
  (8) and hath ordered that the revenues of the temples, and the grants which are made to them annually, both in respect of grain
- 15 and money, and also the proper portion [which is assigned to the gods] from the vineyards, and from the gardens, and the other possessions of the gods, should, as they were in the reign of his father,
- 16 remain the same; and in respect of the priests also, he hath also commanded that they should pay no more as their fee for consecration, than what they had been [formerly] assessed in the time of his father and up to the first year [of his reign].

[Abolition of the Priest's Annual Journey to Alexandria and Reduction of the Tariff] (10) And further he hath released

- 17 members of the priestly class [from the obligation] to sail down [the Nile] annually to Alexandria. (11) And he hath likewise commanded that men shall no longer be seized by force [for service] in the Navy; (12) and of the tax upon cloth of byssus which is paid to the royal treasury by the temples
- 18 he hath remitted two-thirds.

[The Restoration of Peace in the Country and the Granting of an Amnesty]

(13) and whatsoever things had been neglected in times past he hath restored, and set in the order in which they should be; (14) and he hath taken care that the ceremonial obligations to the Gods should be

19 rightly performed; (15) and moreover, he hath administered justice unto every man, even like Hermes, the Great Great (Thoth); (16) and he hath further ordered that those of the soldiers who returned, and of the others

20 who had held rebellious opinions in the troubled times, should, having come back, be allowed to keep possession of their own property.

[Ptolemy V Protects Egypt from Enemies Without]

(17) And he hath made provision that forces of cavalry and infantry, and ships also, should be dispatched against those who were about to invade

21 Egypt, both by sea and by land, [thus] incurring great expenditure in money and grain, so that the temples and all who were in the country might be in a state of security.

[Ptolemy V Punishes the Rebels of Lycopolis]

(18) And having gone

- 22 to Lycopolis, which is in the Busirite nome, which had been occupied and fortified against a siege with an arsenal well stocked with weapons of war and supplies of every kind—now of long standing
- 23 was the disaffection of the impious men who were gathered together in it, and who had done much injury to the temples, and to all those who dwelt in Egypt—and having encamped
- 24 against them, he surrounded it with mounds, and trenches, and marvelous engines; and when the Nile made a great rise (i.e., inundation) in the VIIIth year, and being about, as usual, to flood out
- 25 the plains, he (i.e., the King) held [the river] in check, having dammed up in many places the mouths of the canals, and in carrying out this work spent no small sum of money; and having stationed cavalry and infantry to guard [the dams]
- 26 he took by storm the city in a very short time, and destroyed all the impious men who were therein, even as Hermes (Thoth) and Horus, the son of Isis and Osiris, in those very same places, reduced to subjection
- those who had rebelled.

[Punishment of the Leaders of the Revolt Against Ptolemy IV Philopator]

And the men who had led astray the rebels in the time of his father, and had stirred up revolt in the country, and had committed sacrilege in the temples, having come into Memphis for the purpose of avenging

28 his father and his own sovereignty, he punished according to their deserts at the time when he came there to perform the duly appointed ceremonies for his reception of the crown.

[Remission of Arrears of Taxes and Contributions from the Temples]

(19) And moreover he hath remitted to

- 29 the temples that which was due to the royal treasury up to the VIIIth year of his reign, which was no small amount of corn [small grain] and money; (20) and moreover, he hath remitted the dues upon byssus cloth which had not been paid into the royal treasury,
- 30 and also the charges made for the examination (?) of those which had been sent in during the same period; (21) and he hath also freed the temples from [the tax of] one *artaba* for each *arura* of land [held by the temples], and also [the tax of] one jar of wine
- 31 for each *arura* of vineyards.

[Ptolemy V Provides for the Sacred Animals, and the Worship of the Gods;

His Reward for the Same)

(22) And to [the Bull] Apis, and to [the Bull] Mnevis he hath given many gifts, and to the other sacred animals of Egypt, far more indeed than the kings who were before him, and he was careful in respect of what belonged to them in

- 32 every matter whatsoever, and for their burials he gave all that was needed with splendid generosity, and that which was necessary for private shrines, and for sacrifices, and for commemorative feasts, and for the ordinances as by law (or, custom) prescribed;
- 33 (23) and the honourable estate of the temples and of Egypt he hath maintained in a fitting manner, according to traditional custom; (24) and he hath decorated the Temple of Apis; with fine work, expending upon it gold, and silver, and

- 34 precious stones in no small quantities; (25) and he hath founded (refounded?) Temples, and shrines, and altars, and hath restored those which needed repairs, having the zeal of a beneficent god in matters which relate to
- 35 divine service, and having discovered which of the temples were most held in honour, he hath restored the same during his reign, as was meet. In return for all these things the gods have given him health, and victory, and power, and all
  - other good things, and his
- 36 sovereignty shall remain with him, and with his children for all time.

[The Priests Decree Additional Honours for Ptolemy V and his Ancestors]

With the Fortune (or Luck) Which Favoureth. It hath seemed good to the priests of all the temples in the land, that the honours which have been bestowed upon

- 37 King Ptolemy, the everliving, the beloved of Ptah, the God Epiphanes Eucharistos, and likewise those of his parents, the Gods Phiopatores, and those of his ancestors, the Gods Euergetes, and
- 38 the Gods Adelphoi, and the Gods Soteres, should be greatly added to [viz.]:---

[Statues of Ptolemy V and the Local Chief Gods Are to be Set Up in All the Temples] (1) To set up to the God Ptolemy, the everliving, the God Epiphanes Eucharistos, an image in the most prominent part of every temple,

- 39 which shall be called (inscribed?) 'Ptolemy, the Avenger of Egypt.' And close by this image shall stand [an image of] the chief god of the temple presenting to him the weapon of victory, which shall be constructed after the Egyptian
- 40 fashion. And the priests shall do homage to the[se] image[s] three times each day. And they shall array them in sacred apparel, and they shall perform [for them] ceremonies similar to those which they are wont to perform for the other gods during the festivals which are celebrated throughout the country.

[A Wooden Statue of Ptolemy V in a Golden Shrine is to be Set Up in the Temples]

- 41 (2) And they shall set up for King Ptolemy, the God Epiphanes Eucharistos, the offspring of King Ptolemy (IV) and Queen Arsinoe, the Gods Philopatores, a statue and a golden shrine in each of the temples,
- 42 and they shall place it in the inner chambers [of the sanctuary] with the other shrines. And during the great commemorative festivals, wherein the shrines go forth [in processions], the shrine of the God Epiphanes Eucharistos shall
- 43 go forth with them. And in order that the shrine may be readily distinguished now and in after time, it shall be surmounted by the ten golden crowns of the King, and an asp (i.e., cobra) shall be affixed thereto, even as there is on all the other
- 44 crowns with asps which are on other shrines, but in the centre of them shall be [placed] the crown which is called Pschent, which he (i.e., the King) put on when he went into the Temple [of Ptah] in Memphis to perform therein
- 45 the prescribed ceremonies connected with [his] assumption of sovereignty. And there shall be placed on the [faces of the] square [cornice?] which is round about the crowns, side by side with the above-mentioned crown
- 46 [Pskhent] ten golden phylacteries (i.e., scrolls or tablets?) Which shall bear the inscription 'This is [the shrine] of the King who maketh manifest the Upper Country and the Lower Country.'

[Special Festivals are to be Established in Honour of Ptolemy V]

And inasmuch as the XXXth day of the month of Mesore, whereon the birthday of the King is celebrated, and likewise the XVIIth day of the

- 47 month of Paophi, whereon he received the sovereignty from his father, have been recognized as name-days in the temples, for they were the sources of many benefits for all people, on these days a festival and a panegyry shall be celebrated in the temples of
- 48 Egypt each month, and sacrifices and libations, and all the other rites and ceremonies which are prescribed shall be duly performed

- 49 as on other festivals. [Here a few words are wanting.] (3) And a festival and a panegyry shall be celebrated yearly for King Ptolemy, the everliving, the beloved of Ptah, the God Epiphanes Eucahristos, in all the temples throughout the
- 50 country, from the first day of the month of Thoth, for five days. And they shall wear crowns (i.e., garlands), and shall offer up sacrifices and make libations, and do everything which it is customary to do.

#### [The Priests of Ptolemy V Shall Assume A New Title]

- 51 (4) And the priests of the other gods shall adopt the name of 'Priests of the God Epiphanes Eucharistos,' in addition to the names of the other gods to whom they minister. (5) And in all the decrees and [ordinances] promulgated by them shall be mentioned
- 52 his order of priests.

[Private Individuals May Participate in Paying These Houours to Ptolemy V]

- (6) And members of the laity shall be permitted to celebrate the festival, and to set up and maintain in their houses shrines similar to the aforesaid shrine, and to perform the ceremonies which are prescribed for the festivals, both monthly
- 53 and annually, in order that it may be well known that in Egypt men magnify and honour the God Epiphanes Eucharistos, the King, as they are bound to do by law.

[The Promulgation of the Decree]

(7) And this decree shall be inscribed upon stelae

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<sup>54</sup> of hard stone, in holy, and in native, and in Greek letters, and [a stela] shall be set up in each of the temples of the first, second, and third [class] near the image of the everliving King."

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# The Documentary Hypothesis

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How did the Pentateuch or Torah come to be written?<sup>1</sup> What process was involved in its composition?<sup>2</sup> That is, did the author simply receive visions and write out word for word exactly what he or she<sup>3</sup> had heard and seen in vision? Did he make use of written sources? Did he incorporate oral traditions? Who was the principal author anyway? Do these questions really matter? If so, why?

While many average church members consider Moses the author of the first five books of the Bible, most biblical scholars of the last century have maintained that questions related to the composition of the Pentateuch are best answered by referring to the documentary hypothesis. This is the popular label for the theory of pentateuchal authorship and composition that has dominated most liberal biblical scholarship for the past century. In fact, so thoroughly has it dominated the field that some scholars simply assume it to be correct and feel no need to offer evidence to support it.<sup>4</sup> This in spite of the fact that recently penetrating critiques from both

<sup>&</sup>lt;sup>1</sup>The term Pentateuch refers to the first five books of the Bible and is a transliteration of a Greek term meaning "five scrolls." The term Torah, though it has other meanings also, is sometimes used to denote the same five books and is a transliteration of a Hebrew word meaning "instruction." See the discussion of these terms in Barry Bandstra, *Reading the Old Testament* (Belmont, CA: Wadsworth, 1995), 24.

<sup>&</sup>lt;sup>2</sup>It is worth noting that the meaning of authorship had a broad meaning in ancient times as it does in modern times. For example, according to Jer. 36:4, Jeremiah dictated to his scribe Baruch the words which the Lord had spoken to him, and Baruch was the one who actually wrote them down. So who should be considered the author—God, Jeremiah or Baruch? While many would call Jeremiah the author—correctly, I believe—we should remember the messages actually originated with God and were placed in written form by Baruch. So in this case there were three parties involved in the writing process. Thus, the term composition is helpful because it conveys the broad meaning of the word authorship operable in this paper.

<sup>&</sup>lt;sup>3</sup>Don't laugh. Harold Bloom and David Rosenberg's widely distributed volume, *The Book of J* (New York: Grove Weidenfeld, 1990), contends that the author of the J document, the earliest major literary source of the Pentateuch, was a woman of King Solomon's court.

<sup>&</sup>lt;sup>4</sup>For example, one of my professors at the doctoral level used to refer to the Yahwist creation account and simply assume that everyone knew what he was talking about.

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evangelical and liberal scholars have exposed its major weaknesses.<sup>5</sup>

But what is the documentary hypothesis anyway? Is it a convincing theory of pentateuchal origins? Is it a viable alternative for Christians who take the Bible seriously? The purpose of this paper is to present a brief historical sketch concerning the authorship of the Pentateuch, explain and evaluate the documentary hypothesis, and set forth some suggestions as to how Christians who take the Bible seriously should view this matter of pentateuchal composition.

For most of the first eighteen centuries of the Christian era, pentateuchal authorship was considered pretty much a settled matter. Most people accepted the view that the Pentateuch was composed by Moses, the great lawgiver and deliverer of Israel from Egyptian bondage.<sup>6</sup> It seemed rather obvious. Several verses of Scripture, both inside and outside the Pentateuch,<sup>7</sup> appeared to support this position, and there seemed to be no reason to question it. Thus, the traditional position of the church and the synagogue was that Moses wrote the first five books of Scripture.

However, with the onset of certain intellectual currents in Europe in the eighteenth century, opinion about this matter began to undergo a change. The rise of deistic philosophy, with its belief in an absentee God and corresponding disbelief in supernatural intervention and the inspiration of Scripture, along with a growing tendency to question the traditional assumptions of the Christian establishment, resulted in skepticism toward the traditional view that Moses wrote the Pentateuch and provided fertile soil for the growth of a new view of pentateuchal origins, the documentary hypothesis.

One of the forerunners of the documentary hypothesis was Jean Astruc, a French physician who became interested in the way in which God is referred to by two different names, Yahweh and Elohim, in Genesis and the early chapters of Exodus. In his book he argued that in composing these chapters Moses quoted from one source who knew God only as Elohim and another source who referred to God only as Yahweh.<sup>8</sup> It is worth noting that Astruc did not dispute that Moses

<sup>&</sup>lt;sup>5</sup>From an evangelical perspective, Duane Garrett's *Rethinking Genesis* (Grand Rapids: Baker, 1991) has been called "the most convincing refutation of the documentary hypothesis now in print" (see back cover of book). He notes (13) that though its weaknesses have been exposed, the documentary hypothesis continues to "hover over Old Testament studies and symposiums like a thick fog, adding nothing of substance but effectively obscuring vision." For a strong critique from a liberal perspective, see Rolf Rendtorff, *The Problem of the Process of Transmission in the Pentateuch*, trans. by John Scullion, JSOT Sup 89 (Sheffield: Sheffield Academic P, 1990).

<sup>&</sup>lt;sup>6</sup>My comments here and in other places throughout this paper reflect the insights of Victor P. Hamilton, *The Book of Genesis, Chapters 1–17*, NICOT (Grand Rapids: Eerdmans, 1990), 11–12.

<sup>&</sup>lt;sup>7</sup>We will look at some of these verses below.

<sup>&</sup>lt;sup>8</sup>The English translation of the title of Astruc's book is *Conjectures Concerning the Original Memoranda Which It Appears Moses Used to Compose the Book of Genesis.* It was published anonymously in 1753. (Note: Titles for books originally published in other languages will be translated into English so the intent of the titles is readily understandable.)

was the author. He simply wanted to explore what sources Moses may have used in doing his composition.<sup>9</sup> However, one of the major features of Astruc's work, assigning passages to different sources using different divine names as a criterion, became an important feature of later scholarly theories.

Among the many scholars who followed Astruc and devoted attention to the matter of the composition of the Pentateuch, the most notable is Julius Wellhausen. While most of the features of his views had been anticipated by previous scholars, he is widely credited with providing the definitive formulation of the documentary hypothesis due to the great skill and persuasiveness with which he stated his views.<sup>10</sup> Demonstrating the influential nature of Wellhausen's arguments is the fact that within a mere decade of the publication of his 1878 volume, "Wellhausen's reconstruction of Israel's religious history captured the academic chairs of all British and European Old Testament scholarship."<sup>11</sup>

This hypothesis or theory, in its most basic form, is not complicated. It maintains that though the Pentateuch may appear to the average reader to be a unity, it is actually a compilation of at least four major literary sources, the compilation of which took some four hundred years. These four source documents are the J or Yahwist source,<sup>12</sup> the E or Elohist source, the D or Deuteronomic source, and the P or Priestly source. A brief description of each of the four sources, as well as a sketch of when they were purportedly written and joined, follows.<sup>13</sup>

The J source is the oldest. In our current Pentateuch, it begins with the socalled second creation account in Gen. 2:4b and traces the history of Israel through the patriarchal times to the preparation for the people's entry into Canaan. It was written by an anonymous author in the southern kingdom of Judah around 900–850 B.C., and was characterized by the almost exclusive use of the name Yahweh for God.

Then the E source was written. It follows the same basic story line as J, except it begins with the patriarchs rather than with creation. (Gen. 15 is allegedly the earliest E text in Scripture.)It was also written by an anonymous person, sometime about 750 B.C. However, unlike J, it originated with an author in the northern kingdom of Israel and was characterized by the use of Elohim as the name for God. The next major step in the formation of the Pentateuch occurred sometime around 700–650 B.C. when J and E were joined by a redactor, making JE. However, this

<sup>&</sup>lt;sup>9</sup>G. J. Wenham et al, eds., *New Bible Commentary: 21<sup>st</sup> Century Edition* (Downers Grove, Ill.: InterVarsity, 1994), 48.

<sup>&</sup>lt;sup>10</sup>In fact, so influential is he considered in establishing this viewpoint that the documentary hypothesis is sometimes called the Graf-Wellhausen hypothesis, named after Wellhausen and K. H. Graf. Wellhausen's most important volumes were *The Composition of the Hexateuch*, which appeared in 1876, and *Introduction to the History of Israel*, which first came out in 1878. See the discussion in Gleason L. Archer, *A Survey of Old Testament Introduction*, rev. ed. (Chicago: Moody, 1994), 95.

<sup>&</sup>lt;sup>11</sup>Kenneth A. Mathews, Genesis 1–11, NAC (Nashville: Broadman and Holman, 1996), 71.

<sup>&</sup>lt;sup>12</sup>The label J comes from the German spelling Jahveh instead of Yahweh.

<sup>&</sup>lt;sup>13</sup>Hamilton, *Genesis 1–17*, 14, and Duane A. Garrett, "The Documentary Hypothesis," *The Bible and Spade* 6 (1993): 35, are helpful on this matter.

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redactor left out much of E, which is thus lost to posterity.

The third major source, the D source, is largely confined to the book of Deuteronomy in the Pentateuch. It was produced about 622 B.C., at the time of the Josianic reformation described in 2 Kings 22. It is characterized by a distinctive sermonic style. Also, it restricts the worship of the Lord to one central sanctuary and is marked by an adherence to strict blessing and curse terminology. The D source was then joined with the already combined source JE.

The fourth and final major source is the Priestly code. It begins at Gen. 1:1 and serves as the source for major chunks of Genesis, Exodus, and Numbers, along with nearly all of Leviticus. It was produced in the exilic or post-exilic period, around 500 B.C., and focuses on genealogies, chronological matters, and priestly regulations. About 450 B.C., P was redacted into JED, thus forming the Pentateuch. This, in its most basic form, is the process by which the Pentateuch was formed—according to the documentary hypothesis.

An analogy might be helpful in understanding this process. Often electrical and phone cords consist of several wires that run parallel to one another. However, to guard against damage to the wires or electrical shock to someone touching them, these wires are covered by an outer casing. The outer casing, which is the only portion visible to the onlooker, makes these cords look like a unity. However, should the outer casing be removed, several distinct wires would be visible underneath. Even so, while the Pentateuch may look like a unity, once it is carefully examined, several distinct strands become visible to the astute observer.<sup>14</sup>

To take one passage as an example, Gen. 46 alone is said to come from three different sources, with v. 1 coming from the J source, vv. 2–5 from the E source, vv. 6–27 from the P source, and then vv. 28–34 from the J source again.

Having outlined the basics of the documentary hypothesis and before proceeding to evaluate it, it is appropriate to consider the following question. If this theory is correct, what would the implications be for our understanding of the Pentateuch? How would it affect our view of the value and relevance of the first five books of the Bible?

Several implications come to mind (and you can probably think of some additional ones). First, as one can see, according to the documentary hypothesis, the Pentateuch is a very human document. There is little if any emphasis placed on divine inspiration. While it is true that the Bible, like Jesus Himself, has both divine and human components, the documentary hypothesis magnifies the human component at the expense of the divine. In fact, someone might observe that this theory views the Pentateuch as being produced like any other human document, except for the fact that there is no other document I am aware of that has been produced with the splicing and intertwining of several major sources to make one work with a grand thematic unity that rivals the Pentateuch. To conclude this

<sup>&</sup>lt;sup>14</sup>Hamilton, Genesis 1–17, 15, gives a similar analogy.

point, it should be noted that devotees of the documentary hypothesis are at variance with Christians down through the centuries in the way they view the divine role in the production of the Pentateuch.

Another implication is the theological fragmentation of the Pentateuch that results from this view. According to proponents of the documentary hypothesis, the various sources from which the Pentateuch is composed set forth a variety of competing and contradictory theological ideas, and these ideas jostle and contend and conflict with one another within the total fabric of the theology of the Pentateuch. This view has led to books being written about the perspectives of a certain one of the four literary sources<sup>15</sup> and even to a color-coded Bible which uses a different color of highlighting to indicate which pentateuchal material comes from which source.<sup>16</sup> Since the Pentateuch is, in my view, literally bursting with unity, this is an unfortunate result, but a logical one if the documentary hypothesis is adopted.

A third implication is that the author of the historical incidents recorded in the Pentateuch is removed by many centuries from the events he writes about. Now this is already the case for some of the events recounted in Genesis, even if Moses is the author, but if the Priestly source did not come along until 500 B.C., its author is nearly a millennium removed from the giving of the sanctuary service at Mt. Sinai. For some people, this gives rise to doubts about the reliability of the account, since in the minds of many people there is a direct correlation between the amount of time lapsed before the recording of an event and the degree of inaccuracy found in the written account.

#### **Arguments Used by Proponents**

I now move to a listing and evaluation of the arguments set forth by those who favor the documentary hypothesis.<sup>17</sup> It is worth mentioning that the following lines of evidence can be found in most any book that deals with this subject, whether it favors the theory or argues against it. First, one of the main arguments is the fact that different names for God are used in the Pentateuch, with the two main names being Yahweh and Elohim. As noted above, this feature was what led Astruc to divide a portion of the Pentateuch by sources in the first place.

Now it cannot be gainsaid that the Pentateuch does use different names for God. This is visible even in most English translations, which generally render Elohim as "God" and Yahweh as "the Lord." However, that this feature indicates different sources is far from clear. In fact, several weaknesses are inherent in this assumption. One, the source critics are not always consistent in assigning names to the various sources. For example, Gen. 22:11, which uses the name Yahweh, is

<sup>&</sup>lt;sup>15</sup>For example, see Bloom and Rosenberg, *The Book of J*, which seeks to uncover the perspectives of the author of the J source.

<sup>&</sup>lt;sup>16</sup>Hamilton, Genesis 1–17, 17, states that it is known as "the Rainbow Bible."

<sup>&</sup>lt;sup>17</sup>My listing and critique is taken in part from Garrett, "The Documentary Hypothesis," 38ff.

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considered an E text. Also, the so-called Yahwist creation account speaks of God not simply at Yahweh but as Yahweh Elohim. Rather than viewing the names as indicative of different sources, it is best to view them as communicative of different attributes and characteristics of God, with Elohim being more of a title, telling what God is, and Yahweh, the personal covenant name of God, telling who He is. Additionally, there are numerous Egyptian and Mesopotamiantexts which have the same god being called by several names in the same text, and these texts are not viewed as coming from different sources.

A second argument offered in favor of the documentary hypothesis is the presence of doublets in the Pentateuch. Doublets are stories that seem to either cover the same subject matter or that parallel one another very closely and are thought to have come from different sources. It is widely held, for example, that there are two creation stories, the first coming from the Priestly source (Gen. 1:1–2:4a), and the second coming from the Yahwist (Gen. 2:4b–25). Also, the story of Abraham encouraging his wife to tell the Egyptians she was his sister in Gen. 12:10–20 and the story of Abraham telling the same lie to Abimelech in Gen. 20 are said to come from different sources (the J source and the E source respectively).

What should be said about these supposed doublets? While the first two chapters of Genesis and their so-called two accounts of creation are challenging to understand, recent scholarship supports the concept that there is an underlying unity, that the accounts are complementary rather than contradictory.<sup>18</sup> Regarding Abraham's lack of honesty, it should be noted that the two stories occur in different geographic locations and also differ in other respects. It is not farfetched to assume that Abraham, having used this strategy previously, somewhat successfully, simply decided to employ it again. As to the larger issue of repetition in the Pentateuch, Duane Garrett has observed that "if two or more separate events were perceived to be similar to one another, ancient writers tend to give accounts of the events in parallel fashion."<sup>19</sup> In other words, this is characteristic of ancient literature and only to be expected. Perhaps a warning is in order. We need to be careful about judging an ancient corpus of literature by the strictures and rules we apply to modern writings.

A third argument offered by the proponents of the documentary hypothesis is the supposed contradictions that exist within the Pentateuch. For example, the two creation accounts are said to contradict one another regarding the order of creation and the method of forming man. Additionally, there is allegedly a conflict between the number of animals taken aboard the ark, with the Priestly source stating one pair of each kind of animal (Gen. 6:20) and the Yahwist source indicating seven pairs (Gen. 7:2–3).

<sup>&</sup>lt;sup>18</sup>Garrett, in *Rethinking Genesis*, 195, speaks of "unity in the structure and message of Genesis 1–2" and praises the work of Seventh-day Adventist scholar Jacques Doukhan, saying that thanks to his work "any reading of Genesis 1–2 as two unrelated texts juxtaposed to one another is impossible."

<sup>&</sup>lt;sup>19</sup>Garrett, "The Documentary Hypothesis," 41.

In response, it might be noted that some of these contradictions are more apparent than real. As observed above, it is possible to see the two creation accounts as complementary to one another. As for the number of animals taken aboard the ark, Gen. 7:2 can be taken as providing further details to Gen. 6:20, in that it specifies seven pairs of "all clean animals." Now this is not to say there are no interpretive challenges faced by those who take the position that the Pentateuch is a unified document. The identity of the sons of God in Gen. 6 is one such example. However, in my view, it is better to suspend judgment on such issues while awaiting further evidence instead of assuming a contradiction because the information came from two conflicting sources.

A fourth argument is that the different religious understandings found in the Pentateuch testifies to different sources. The style of the Yahwist is said to be more formal and simple. He presents the contact between God and the patriarchsas being very direct, as in Gen. 17:1, "The Lord appeared to Abram." The Priestly source is supposedly more formal and repetitious, recording lists, numbers, and genealogies. And the Elohist tends to dilute the contact between God and humans, introducing angels and dreams as the means of communication (Gen. 28:12).

In response, it should be said that literary style is determined, at least in part, by subject matter, and that different literary styles do not necessarily indicate different authors. A modern example of this is the different literary styles used by the great Christian writer C. S. Lewis. *The Chronicles of Narnia*, a set of highly allegorical "children's" books, are stylistically different from *Mere Christianity*, Lewis's classic defense of the Christian faith, yet both are by the same man. Regarding whether God directly communicates with humans or uses angels or dreams, this seems to me a minor quibble. Perhaps it is enough to simply say that God has more than one means of communication (see Heb. 1:1), just as humans today can converse in person, by telephone, by ham radio, and in other ways as well.

## Conclusion

In light of the lack of supporting evidence, Duane Garrett is correct when he states, "The Documentary Hypothesis must be abandoned."<sup>20</sup> Though it raises a number of issues that need to be considered, the conclusions it draws are not warranted by the evidence.

But if the documentary hypothesis is unsound, what can be said about the authorship and composition of the Pentateuch? Making the question especially acute is the fact that when the text of Genesis through Deuteronomy is carefully examined, it doesn't seem that every word came original and fresh from Moses. In light of this, what stance should Bible-believing Christians adopt regarding this matter?

Several points should be kept in mind. First, in determining our views on this

<sup>&</sup>lt;sup>20</sup>Garrett, "The Documentary Hypothesis," 49.

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matter, we should begin with the text of Scripture itself. At least three of the five books of the Pentateuch contain references to the writing activity of Moses.<sup>21</sup> In my view, the incidental nature of the reference in Num. 33:2 makes it all the more valuable, suggesting that perhaps Moses kept a travel diary of some kind that could have later been used as a source for information in writing the Pentateuch. Reading further afield in the Bible, it is worthy of note that Jesus supports the concept of Mosaic authorship in John 5:46. Jesus does not say, "Moses spoke about me," but He states, "He wrote about me." As a Christian, the view of Christ on this issue matters to me a great deal. It seems that the view of the Christian community on various issues should mirror that of the Lord they profess to follow.

Second, Christians who support Mosaic authorship of the Pentateuch should be aware that there will probably never be any discovery of overwhelmingevidence to convince the skeptics of this position. I don't think it is likely that an original copy of Genesis or Exodus will ever be found that says "by Moses" on the first or last page. On the other hand, it is good to be aware that there is some helpful evidence that is consistent with the position of Mosaic authorship. I am referring to the way in which the text reflects an Egyptian background. This, of course, should not be surprising if the author spent the first forty years of his life in the land of Egypt.<sup>22</sup>

Another point to be kept in mind is what I do *not* mean when I take the position that Moses was the author/compiler of the Pentateuch. I do not mean that Moses wrote every single word so that the current form of the entire Hebrew Pentateuch is exactly the same as it came from his pen. It is clear that there are some post-Mosaic elements in the text. Not only the account of Moses' death in Deut. 34, but also other statements reflect post-Mosaic editorial activity.<sup>23</sup> A high view of inspiration does not preclude editorial work by someone other than the original author.

I also do not mean that every word was original with Moses. It is not only possible but likely that Moses made use of written sources (see Num. 21:14), even as Luke would later do in constructing his gospel (see Luke 1:1–4). It also seems probable that Moses made use of oral tradition in composing the Pentateuch.<sup>24</sup> It bears emphasizing that originality is not a prerequisite for inspiration. All truth belongs to God, and He has the right to inspire His prophet to make use of it, even if it is derived from another source, whether oral or written.

<sup>&</sup>lt;sup>21</sup>See Exod. 24:4; Num. 33:2; Deut. 31:9, 24,

<sup>&</sup>lt;sup>22</sup>E.g., Egyptian loan words and knowledge of Egyptian customs and practices; see Archer, *Survey of Old Testament*, 118–125.

<sup>&</sup>lt;sup>23</sup>For example, see Gen. 13:6b; Gen. 36:31.

<sup>&</sup>lt;sup>24</sup>Ellen White, in the Introduction to *The Great Controversy* (Mountain View, CA: Pacific Press, 1911), comments, "During the first twenty-five hundred years of human history, there was no written revelation. Those who had been taught of God communicated their knowledge to others, and it was handed down from father to son, through successive generations. The preparation of the written word began in the time of Moses."

Of course, I do affirm the possibility of special revelation through vision as the likely source from which Moses gained some of his information. It seems to me that the creation account would be a likely candidate for being revealed through special revelation. Moses' forty days on Mt. Sinai certainly allowed time for special revelations from God that could later have been recorded in Scripture. By way of contrast, Moses would have needed no vision to record the events he experienced himself as he led the Israelites.

In conclusion, in light of the weaknesses inherent in the documentary hypothesis, this is certainly not the time for Bible-believingChristians to be flocking to its banner. Rather, it is an auspicious time for them to affirm a more traditional view, one which is in harmony with the perspective of their Lord, with the teachings of Scripture itself, and which is consistent with the concept of the divine inspiration of the sacred writings.<sup>25</sup>

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 $<sup>^{25}</sup>$ Mathews, in *Genesis 1–11*, 76, contends that traditionalists may now have their best opportunity in two centuries "to contend for a viable alternative in the topsy-turvy environment of pentateuchal studies that has arisen."

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# Who are the Habiru of the Amarna Letters?

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Despite numerous studies devoted to the question of who the "Habiru" were, a lively controversy still continues. The heart of the controversy pertains to that portion of the people referred to as "Habiru" who were attempting to take over the land of Canaan. In urgent dispatches sent to the Egyptian Court of Pharaohs Amenhotep III and his son, Akhenaten, the chieftains of the land of Canaan speak of the Habiru as a perilous threat to their city-states.

It was the discovery in 1887 of over 350 cuneiform letters at Tell el-Amarna in Middle Egypt, the site of Pharaoh Akhenaten's capital, which opened up to the modern world new vistas on what had been occurring at a crucial time when Egypt was losing her grip upon her Asiatic Empire. These clay tablets, which were part of the Egyptian royal archives, the so-called "Amarna Letters," continue to raise a good deal of interest. And it is within this Amarna archival correspondence that the Habiru appear as powerful foes of Egyptian authority; a major force that had important effects upon events within the region of Palestine-Syria.<sup>1</sup>

The present interest in the Habiru is primarily caused by three factors: (1) the resemblance between the names Habiru and Hebrew, (2) the chronological relationship between the Amarna Habiru and the Israelites, and (3) the proximity of their location within the land of Canaan to that of the Hebrews in Joshua's time. The present article intends to address all three of these factors.

On the question of resemblance, it is now agreed upon that indeed there is a valid etymological relationship between the term "Habiru" and the biblical name "Hebrew" (*cibri*).<sup>2</sup> A major obstacle, however, prevents an automatic equating of

<sup>&</sup>lt;sup>1</sup> Michael C. Astour, "Habiru," in *The Interpreter's Dictionary of the Bible*, Supplementary Volume, ed. Keith Crim (Nashville, TN: Abingdon, 1976), 383.

<sup>&</sup>lt;sup>2</sup> Nadav Na'aman, "Habiru and Hebrews, The Transfer of a Social Term to the Literary Sphere," *JNES* 45 (1986):278; Manfred Weippert, *The Settlement of the Israelite Tribes in Pales*-

the two terms as equivalent. For while the name "Hebrew" in Scripture serves the purpose of a gentilic designation for ethnic Israelites, the purpose of the appellation "Habiru" in ancient Near Eastern cuneiform literature (of which the Amarna Letters are a part) is primarily used in a sociological sense. As already intimated, the Habiru of the Amarna correspondence appear as enemies of the crown, bent on destroying the established authority of Canaanite feudal society. Consequently, those labeled with this appellation were looked down upon as a negative component of the population.<sup>3</sup> But does this mean that they constitute a social class?

Since the discovery of the Amarna Letters, where the appellation "Habiru"<sup>4</sup> usually is written by the use of the Sumerian logogram *SA.GAZ*, the term also has turned up in a number of cuneiform texts from different parts of Mesopotamia, Syria, Egypt, and Asia Minor in a time-span dating from the end of the third millennium B.C. to the end of the Late Bronze Age (1200 B.C.).<sup>5</sup> Among all these existing documents the term is not considered an ethnicon, but rather an appellation representing a certain segment of society.<sup>6</sup> This has come to in-fluence the way the term Habiru, of the Amarna tablets, is interpreted. Even though it is hard to separate the Habiru from the Hebrews, who settled in the very same land of Canaan, many have come to view the Amarna Age Habiru as a socially marginal people, indigenous to the land of Canaan.<sup>7</sup>

If the Habiru can be identified as citizens of Canaanite states or even as heads of state, then the hypothesis would be confirmed that the term represents a non-ethnic segment of the internal population of Canaan. Two examples in the correspondence from north Canaan illustrate the state of the evidence. Rib-Haddi, the leader of the city-state of Byblos, complains in his letter to Pharaoh: "All my cities which are situated in the mountains or along the sea have sided

tine. Studies in Biblical Theology, Second Series 21 (Naperville, IL: Alec R. Allenson, 1971), 74-82.

<sup>&</sup>lt;sup>3</sup> William L. Moran, "Join the 'Apiru or Become One? In "Working With No Data": Semitic and Egyptian Studies Presented to Thomas O. Lambdin, ed. By David M. Golomb (Winona Lake, IN: Eisenbrauns, 1987), 209-212. Niels Peter Lemche, "Habiru, Hapiru," in The Anchor Bible Dictionary (H-J), ed. David Noel Freedman (New York: Doubleday, 1992), 8.

<sup>&</sup>lt;sup>4</sup> In spite of both Egyptian and Ugaritic evidence favoring a rendering of Hab/piru by 'Apiru, cuneiform literature favors the rendering as Habiru; the name is spelled in cuneiform  $Habir\bar{a}yu$  represented by a *bi* sign which is never *pi*; Lemche, op. cit., 7.

<sup>&</sup>lt;sup>5</sup> Moshe Greenberg, *The Hab/piru*, American Oriental Series, Vol. 39 (New Haven, CT: American Oriental Society, 1955), 3-12.

<sup>&</sup>lt;sup>6</sup> Nadav Na'aman, "Amarna Letters," in *The Anchor Bible Dictionary* 1 (A-C), ed. by D. N. Freedman (New York: Doubleday, 1992), 178.

<sup>&</sup>lt;sup>7</sup> A much discussed theory is that the Habiru were Canaanite peasants who were in revolt against their overlord; that they were a poor underclass in the process of breaking away from the existing city-state structures. Hershel Shanks, "Israel's Emergence in Canaan: *BR* Interviews Norman Gottwald," *BR* 5/5 (October 1989):26-34.

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with ( $n\bar{e}pušu$  ana) the Habiru-people" (EA 74:19-21).<sup>8</sup> In other words, the outlying citizenry of Rib-Haddi's kingdom have identified themselves (in the eyes of Rib-Haddi) with the unworthy and disloyal "Habiru," and thus are to be considered as enemies of the crown.

The second example actually defines the then current understanding of the term: "Now he [Aziru, the leader of the kingdom of Amurru] is like the *SA.GAZ*-people, a stray dog (*kalbu halqu*), and has seized Sumur, the city of the Sun, my lord" (EA 67:16-18). In this missive the charge is made that a head of state has become like the Habiru because his actions are comparable to a "stray dog" who obeys no master, who illegally seizes what he can, and otherwise pays no attention to existing authority.<sup>9</sup>

It needs to be noticed that in these two examples, neither the citizens of Letter 74 nor the head of state in Letter 67 actually are identified as "Habiru." Nor do they join the Habiru, so as to be part of an existing external group. Rather, the charge is made that the defectors act like Habiru-people. Being disloyal or subversive, in the idiom of that time, is "to act" ( $ep\bar{e}su$ ) Habiru, that is, to "side with" the dangerous Habiru-enemy.

If it could be shown that the biblical Hebrews were an active presence in the land of Canaan during the time of the Amarna Age (14<sup>th</sup> century B.C.), then the case would become much more attractive in identifying at least some references to the Habiru as referring to the Israelites. In this connection, it may be observed that late-Egyptian texts and inscriptions from the time of Seti I (1294-1279 B.C.) and Ramses II (1279-1213 B.C.),<sup>10</sup> speak of the Western portion of Galilee as <sup>2</sup>Isr, a seeming reference to territory settled by the Hebrew tribe of Asher.<sup>11</sup> In Papyrus Anastasi I (the so-called "Satirical Letter"), composed during the reign of Ramses II, the Asherites evidently were long enough in Canaan

<sup>&</sup>lt;sup>8</sup> The translations given here are a result of consulting several sources, including: William L. Moran (ed. and trans.), *The Amarna Letters* (Baltimore and London: Johns Hopkins UP, 1992); William F. Albright, "The Amarna Letters" in *Ancient Near Eastern Texts Relating to the Old Testament* (hereafter *ANET*); Second Edition, ed. James B. Pritchard (Princeton, NJ: Princeton UP, 1955), 483-490; Anson F. Rainey, *El Amarna Tablets 359-379*. Second Ed. (=AOAT 8, Neukirchen-Vluyn, 1978); Richard S. Hess, *Amarna Personal Names*. ASOR Dissertation Series 9 (Winona Lake, IN: Eisenbrauns, 1993); and Samuel A. B. Mercer (ed.), *The Tell El-Amarna Tablets* (Toronto: Macmillan, 1939).

<sup>&</sup>lt;sup>9</sup> Following the remarks of George E. Mendenhall, *The Tenth Generation* (Baltimore and London: Johns Hopkins UP, 1974), 130.

<sup>&</sup>lt;sup>10</sup> Sh. Yeivin, *The Israelite Conquest of Canaan* (Istanbul: Nederlands Historisch-Archaeologisch Instituut In Nabije Oosten, 1971), 23, 31.

<sup>&</sup>lt;sup>11</sup> The identification of *I-s-r* in the list of Seti I with the tribe of Asher is considered doubtful by W. F. Albright, "Northwest-Semitic Names in a List of Egyptian Slaves from the Eighteenth Century B.C.," *JAOS* 74 (1954):229-231. Yeivin, on the other hand, feels the equation is certain. Yeivin, *op. cit.*, 23: "The occurrence of Asher in the list of Seti I provides the clearest indication for the name's connection with W. Galilee." Diana V. Edelman, "Asher," in *The Anchor Bible Dictionary, op. cit.*, 482.

to have given rise to a folk-tale about a "chief of Aser" who escaped from an angry bear by climbing a tree somewhere near the region of Megiddo.<sup>12</sup>

That the Israelites had been in Canaan from as early as the beginning of the 13<sup>th</sup> century B.C. may also be indicated by the smaller Beth-shan stela of Seti I. The stela commemorates a military campaign in which Pharaoh's forces encountered a band of warriors whom Seti's scribe called "Apiru."<sup>13</sup> (the Egyptian equivalent to cuneiform "Habiru"<sup>14</sup>). What helps to identify these Apiru warriors is the place they came from. According to the hieroglyphic inscription, their homeland was Yarmuta, a Galilean hill known in Scripture as the Yarmuth heights, within the territory of the Hebrew tribe of Issachar (Josh 21:29).<sup>15</sup>

The fact that these Apiru lived in the hill-country rather than in the plains and the low hill-country of Western Palestine, accords well with what we know from the biblical records.<sup>16</sup> For when the Israelites came into Canaan, they found the Canaanites in possession of chariots (Josh 17:16, 18; Judg 1:19; 4:3) which could more easily be maneuvered on the level, lowland plain. Utilizing these frightening war-vehicles, covered with protective metal (Josh 17:16, 18), the Canaanites successfully pushed the early Hebrews off the plains, so that they remained pressed back into the interior highlands (Judg 1:19, 34). Possibly, this was one of the reasons why the important Canaanite fortress of Beth-shan, located in the wide valley of Jezreel, long remained a Canaanite city among those allotted to the tribe of Manasseh by Joshua (Judg 1:27).

The existence of Apiru on Mount Yarmuta, probably to be identified as 13<sup>th</sup> century Hebrews of the tribe of Issachar, lend an added witness to later information concerning Israel's whereabouts. As is well known, the so-called "Israel Stela," the famous hieroglyphic monument erected in 1207 B.C. by Pharaoh Merneptah, boasts of a victory in battle over a people called Israel.<sup>17</sup> Not only is the defeat of Israel considered a major achievement, but the name "Israel," within the poetic internal structure of the stela's coda section, is considered significant enough to serve as a people-entity, in complementary tandem to city-

<sup>&</sup>lt;sup>12</sup> John A. Wilson, "A Satirical Letter," in ANET 477; Yeivin, op. cit., 31, 41.

<sup>&</sup>lt;sup>13</sup> Wilson, "Beth-Shan Stela of Seti I," in ANET 255.

 $<sup>^{14}</sup>$  Wilson, ANET 261, n. 9, and Wilson in a review of The Hab/piru by Moshe Greenberg in JNES 16 (1957):140 .

<sup>&</sup>lt;sup>15</sup> After studying the text, W. F. Albright was led to remark: "These warriors are unquestionably the *Ha-pi-ru* warriors of the Amarna Tablets.... There is in general such extraordinary resemblance between the role of the <sup>c</sup>Apiru and that of the Hebrews in the earliest biblical sources that it is scarcely possible to doubt some relation." Albright, "The Smaller Beth-shan Stele of Sethos I (1309-1290 B.C.)," *BASOR*, No. 125 (1952):27, 32. Yeivin believes that the group called "Teyer," who are allies of the Apiru, is to be identified with *Tōla<sup>c</sup>*, one of the main Issacharite clans," Yeivin, *op. cit.*, 40.
<sup>16</sup> Albright, *From the Stone Age to Christianity*. Second Edition (Garden City, NY: Double-

<sup>&</sup>lt;sup>10</sup> Albright, *From the Stone Age to Christianity*. Second Edition (Garden City, NY: Doubleday, 1957), 277-278.

<sup>&</sup>lt;sup>17</sup> Wilson, "Hymn of Victory of Mer-ne-Ptah (The 'Israel Stela')," ANET 378.

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states in Canaan.<sup>18</sup> The stela thus testifies to the fact that Israel was a well-known ethnic establishment which had been in existence long enough to enjoy a prominent position within the land of Canaan.<sup>19</sup>

The most compelling data indicating that the Hebrews already were in Canaan by the 14<sup>th</sup> century B.C., are found within the Amarna Letters themselves. Although the Scriptural account of the Hebrew Conquest of Canaan fails to mention that the land of Canaan was an Egyptian-administered province (as indicated, for example, in Amarna Letters 36:15; 8:25), the same type of political structure that Joshua encountered in Canaan may be observed in the Amarna correspondence. As in Joshua's Canaan, the Amarna texts speak of independent city-states who possess the freedom to form their own alliances and pursue their own local agendas (though they owed nominal allegiance to Egypt). They even were able to recruit their own armies, although the Egyptian government did not give official sanction to the practice.<sup>20</sup>

While the title of a Canaanite chieftain was "man" (*awîlu*: man with legal status) of such-and-such a city-state, and his appointed office, under an Egyptian overseer (a *rabisu*—official), was that of a "mayor" (*hazannu*), nevertheless, within his own Canaanite-society, he was known as "king" (EA 147:67; 148:40-41; 197:13-14; 227:3; 256:8), exactly as he is called in the book of Joshua (Josh 10:23).<sup>21</sup> Similarly, the biblical phrase "kings of Canaan" (Judg 5:19; *cf.* Josh 5:1) finds its duplication in the Akkadian expression "kings of Canaan" from the Amarna Letters (EA 30:1; 109:46; *cf.* 8:25).

A sampling of observations taken from the Amarna Letters which seem to touch upon the very events narrated in Joshua-Judges is enumerated below as examples of why the Habiru, in some cases, indeed may be considered Hebrew:

1. There is a significant silence within the Amarna correspondence about those very places in central Palestine which the Hebrew armies under Joshua had overrun. In contrast to the many references to places in the south and north, there is no word arriving at the Egyptian Court from such places as Jericho, Bethel, Gibeon, Shiloh, Mizpeh and Debir, those very cities captured by Joshua.<sup>22</sup> Was this because the Amarna sources date from a time immediately after the first impact of the invasion into Canaan by Joshua's armed forces?

<sup>&</sup>lt;sup>18</sup> G. W. Ahlström and D. Edelman, "Merneptah's Israel," *JNES* 44 (1985):60-61. In Michael Hasel's careful analysis of the poem's structure, Israel, as a people, constitutes a subdivision, along with other listed city-states, within the land of Canaan; Michael G. Hasel, "*Israel* in the Merneptah Stela," *BASOR* No. 269 (1994):48.

<sup>&</sup>lt;sup>19</sup> Frank J. Yurco, "3,200-Year-Old Picture of Israelites Found in Egypt," *BAR* 1 6/5 (Sept/Oct 1990):27-28.

<sup>&</sup>lt;sup>20</sup> M. Abdul-Kader Mohammad, "The Administration of Syro-Palestine During the New Kingdom," *Annales du Service des Antiquites de l'Egypte* 56 (1959):108-109.

<sup>&</sup>lt;sup>21</sup> Albright, "The Amarna Letters from Palestine," *Cambridge Ancient History*, Second Edition, Vol. II, Chap. XX (New York and Cambridge: Cambridge UP, 1966), 8.

<sup>&</sup>lt;sup>22</sup> Edward F. Campbell, Jr., "The Amarna Letters and The Amarna Period," *BA* 23 (1960):11; Theophile James Meek, *Hebrew Origins* (New York: Harper & Brothers, 1960), 21.

2. The ruler of Gezer writes to inform Pharaoh that "there is war against me from the mountains" (EA 292:28-29). As other missives from the city of Gezer make clear, the enemy in the mountains are the Habiru. Gezer's king pleads with Pharaoh to "save his land from the power of the Habiru," for the war "is severe" (EA 271:10-11, 13-16). A further Gezer missive makes the telling admission that: "the Habiru are stronger than we" (EA 299:18-19).

Gezer's critical position, as found in the Amarna texts, correlates with the city's situation as set forth in the book of Joshua. Even as the Habiru could not overrun Gezer, so too, the Hebrews of Joshua's time failed to conquer the city. Nevertheless, the Israelites were militarily stronger than their foes and were thus able to impress a tribute of servile work upon the Canaanites of Gezer (Josh 16:10). Perhaps this is why Gezer's ruler reports that people (=his citizens) can be ransomed "from the mountains for 30 shekels of silver" (EA 292:48-50). The only way the king of Gezer could rescue those from his own citizenry, who had been made liable to forced labor, was to pay as ransom the going price for a slave.<sup>23</sup>

3. The letters to Pharaoh from Jerusalem speak of the Habiru as gaining power throughout the country: "I am situated like a ship in the midst of the sea. The strong arm of the king [of Egypt] took the land of Naharaim [northern Mesopotamia] and the land of Cush [south of Egypt], but now the Habiru have taken the very cities of the [Egyptian] king. Not a single mayor remains to the king, my lord; all are lost" (EA 288:33-40).

In this same letter, Abdi-Heba, who was in charge of Jerusalem, makes the revealing admission (lines 9-10) that he does not hold the office of mayor (the position of a *hazannu* appointed by the crown), but rather is a mere "post commander" (a  $we^{2}u$ : leader of a military company). By coupling this information with events reported to have taken place during Joshua's day, Abdi-Heba's surprising status becomes more understandable. The fact that he was not an awilu, or an *hazannu*, nor a *šar* (king), but rather an ordinary army officer who had been called upon to take charge of a kingdom, indicates that this was a highly unusual situation.<sup>24</sup> The possibility presents itself that the previous ruler had

<sup>&</sup>lt;sup>23</sup> As documented at Nuzi and Ugarit, the price of a slave during the 14<sup>th</sup> and 13<sup>th</sup> centuries B.C. was 30 shekels. Kenneth A. Kitchen, "The Patriarchal Age: Myth or History? *BAR* 21/2 (March/April 1995):52.

<sup>&</sup>lt;sup>24</sup> Abdi-Heba's position as a military officer and not as a mayor is made evident in two letters (EA 288:9-10; 285:5-67). He makes clear that his position is due neither to his father or his mother, but rather to the strong arm of the king "who brought me into my father's house" (EA 286:9-13). Possibly it was an Egyptian military force which established Abi-Heba as ruler over Jerusalem. The reference to "father" and "house" may not be a case of filial relationship, but rather a conventional manner of stating Abi-Heba's status as the "son" of Pharaoh. For example, the Canaanite city of Sumur is referred to as Pharaoh's house (EA 59:34-37; 84:13). For a discussion of Abdi-Heba's position, compare William L. Moran, "The Syrian Scribe of the Jerusalem Amarna Letters," in *Unity and Diversity*, ed. by Han Goedicke and J. J. M. Roberts (Baltimore and London: Johns Hopkins P, 1975), 155-156.

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been none other than Adoni-zedek, who had been king of Jerusalem, only to have been defeated and then slain by Joshua (Josh 10:23-26). In spite of this defeat, the Bible points out that the inhabitants of Jerusalem could not be driven out, or forced to surrender (Josh 15:63; Judg 1:21). Having been left in the void of a leaderless city-state, it would be plausible for the inhabitants of Jerusalem to have been placed under a surviving military commander.

Abdi-Heba warned Pharaoh of the impending gravity of the situation which he faced: "The king has no lands. The Habiru-people<sup>25</sup> plunder all the lands of the king....if there are no archers [sent here, then] lost are the lands of the king" (EA 286:55-60). Though the logogram SA.GAZ is used exclusively throughout the Amarna Letters, a singular exception is to be found in the letters of Abdi-Heba. In his missives, he plainly spells out (to avoid confusion?) the name of the enemy as *Ha-bi-ru*.

In Joshua's day, Jerusalem was a powerful kingdom at the head of a coalition of city-states, enjoying a political influence which extended over a wide range of the surrounding hill-country and the Shephelah (Josh 10). But in the Amarna tablets the political standing of Abdi-Heba's city has been reduced to a modest position. Illustrative of this political decline is Letter 290, in which Abdi-Heba passes on the bad news that the neighboring city-state of Beth-horon (northwest of Jerusalem) had broken her covenant commitment (the verb used is  $pat\bar{a}ru$ , "to loose" [the bond]) with Jerusalem (EA 290:12-18).<sup>26</sup>

The first stage of the disintegration of the Jerusalemite coalition had been the breaking away of the territory of the Gibeonites (comprised of four towns) to the enemy, that is, the camp of Israel (Josh 9:3-15; 10:3-4). A second stage of the disintegration was Joshua's defeat of a coalition army, consisting of five allied kings headed by the ruler of Jerusalem. The book of Joshua reports that the victorious Hebrews slew all five kings (Josh 10:5, 23-24). Letter 290 reports further disintegration, the loss of the town of Beth-horon. Faced with such a deteriorating situation, Abdi-Heba is compelled to warn Pharaoh that if he does not send military help, then "the land of the king will desert (pataru) to the Habiru" (lines 23-24).

4. The most telling convergence between the Amarna tablets and the biblical "Conquest" account is found in letters concerning an interesting ruler by the name of Labayu, who controlled an extensive kingdom which included the region of Shechem. In Abdi-Heba's eyes, Labayu had become a traitor. Jerusa-

<sup>&</sup>lt;sup>25</sup> The word *Habiru* (EA 286:56) is used with the determinative of people (*amelūti*). Hence it seems unlikely that the word should be confined to a single individual, as W. Moran asserts; Moran, *Amarna Letters, op. cit.*, 327, n. 6.

<sup>&</sup>lt;sup>26</sup> Compare the analysis of Z. Kallai and H. Tadmor, "Bit Ninurta=Beth Horon—On the History of the Kingdom of Jerusalem in the Amarna Period," *Eretz-Israel* 9 (W. F. Albright Volume), ed. by A. Malamat (Jerusalem: Israel Exploration Society, 1969), 138. On the identity of Beth-horon the Nether in EA 290, see Albright, *Yahweh and the Gods of Canaan* (London: Athlone, 1968), 120 and n. 72.

lem's leader rhetorically asks if Pharaoh would want Egypt's vassal rulers to act in the same treacherous manner as Labayu "who gave Shechem to the Habiru?" (EA 289:21-24). Since the word "Habiru," as here used, is linked with both the determinative of country (ki) as well as people (*amelūti*), the phrase could be understood to mean that Labayu made the land of Shechem into Habiru territory. The tie-in with biblical history is so striking that one prominent scholar was led to observe: "This may be one of the early crises in the history of Shechem which led to its being occupied by a dominantly Hebrew population in the time of Joshua ......<sup>27</sup>

Nowhere does Scripture mention a military conquest of Shechem by the Hebrews. Apparently Amarna Letter 289 reveals how the Israelites gained possession of the Shechem region without the use of force. In parallel agreement, the archaeological evidence indicates that the Late Bronze city once ruled by Labayu and his sons never suffered a destruction, but rather experienced a peace-ful transition from Labayu's time to the later Iron Age.<sup>28</sup>

As reported by the Bible, after defeating the cities of Jericho and Ai, the Hebrews, under their leader Joshua, gathered for a great convenant-renewal assembly at Shechem (Josh 8:30-35; *cf.* Deut 11:29-30; 27:4-13). Even though the whole region of central Canaan still remained unconquered territory, the entire camp of the Israelites, with their defenseless women and children, were able to move safely all the way from their base-camp at Gilgal, in the plains of Jericho, to their convocation at Shechem.<sup>29</sup>

Was this due to the largess and goodwill of the Canaanite chieftain Labayu? Since the patriarch Jacob had once owned a portion of ground at Shechem, and had willed it to his son Joseph (Gen 48:22 with 50:25-26; Josh 24:32), it may have been that the Hebrews pressed a prior legal claim to the region. One can only speculate on the background of events allowing the Hebrews a peaceful and safe arrival at Shechem.

We do, however, possess a letter from Labayu, in which he defends his actions: "Who am I that the king [of Egypt] should lose his land on account of me? The fact is that I am a loyal servant of the king" (EA 254:8-11). Fortunately for the historian, a hieratic docket written in ink was placed by an Egyptian scribe at the base of cuneiform tablet 254, thus indicating that the letter had been received by the Egyptian Court in what appears to be the thirty-second

<sup>&</sup>lt;sup>27</sup> Albright, *ibid.*, 77; *cf.* G. Ernest Wright, *Shechem: The Biography of a Biblical City* (London: Duckworth, 1965), 18, 200.

<sup>&</sup>lt;sup>28</sup> Campbell and James F. Ross, "The Excavation of Shechem and the Biblical Tradition," BA 26 (1963):10.

<sup>&</sup>lt;sup>29</sup> Following after Bryant G. Wood, "The Role of Shechem in the Conquest of Canaan," in *To* Understand the Scriptures: Essays in Honor of William H. Shea, ed. by David Merling (Berrien Springs, MI: Institute of Archaeology, Andrews U, 1997), 246-247.

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regnal year of Pharaoh. Though the name of the Pharaoh is not given, it could only have been Amenhotep III, who enjoyed a reign of some 38 years.<sup>30</sup>

The significance of this chronological datum may be appreciated when placed in the context of biblical history. If it is conceded that Israel's Exodus from Egypt took place in the 15<sup>th</sup> century B.C., the very time favored by the chronological statements in the Bible (see 1 Kgs 6:1; Judg 11:16), then the conclusion necessarily follows that one of the rulers of the Egyptian 18<sup>th</sup> Dynasty is the "Pharaoh of the Exodus." The biblical chronological data makes it likely that the best candidate for that title would be Amenhotep II.<sup>31</sup> If so, then he would have been the infamous Pharaoh who came to an ignominious end by drowning in the Red Sea (Ex 15:4-5; Ps 136:15).

Following the demise of Amenhotep II, the next ruler, Thutmose IV, reigned for nine years and eight months; subsequently being followed on the throne by Amenhotep III. This means that the thirty-second regnal year of Amenhotep III occurs forty-one years after the death of his grandfather Amenhotep II. Was it not at this precise time, forty years after the Exodus, that the Hebrews had their convocation at Shechem? Is it coincidence that the turning over of Shechem into Habiru territory appears at this very time in secular history, forty years after the death of the Pharaoh of the Exodus? Here is a synchronous merging of both Hebrew and Habiru history which offers a plausible indication as to the true nature of the events taking place within the Amarna correspondence.

5. In Letter 148, Abi-Milku, the ruler of Tyre, provides a report to Pharaoh Akhenaten concerning enemies who were causing grave problems in the province of Canaan. The king of Sidon, a rival ruler to the north, is of major concern, for his forces were besieging Tyre (lines 23-40). Another enemy is the king of Hazor, who abandoned his fortress<sup>32</sup> "and has aligned himself with the Habiru...[and] has turned over the king's land to the Habiru" (lines 41-43, 45).

<sup>&</sup>lt;sup>30</sup> Albright, *Cambridge Ancient History, op. cit.*, 5; Albright, review of J. de Koning's *Studien* over de El-Amarnabrieven en het Oude-Testament inzonderheid uit historisch Oogpunt, JNES 6 (1947):59; Donald B. Redford, *History and Chronology of the Eighteenth Dynasty of Egypt: Seven Studies* (Toronto: U of Toronto P, 1967), 155, n. 282.

<sup>&</sup>lt;sup>31</sup> Charles F. Aling, *Egypt and Bible History* (Grand Rapids: Baker, 1981), 97. Siegfried H. Horn, "Exodus," in *Seventh-day Adventist Bible Dictionary*. Revised Edition (Hagerstown, MD: Review and Herald, 1979), 349-350; Horn, "What We Don't Know About Moses and the Exodus," *BAR* 3 (June 1977):22-24.

<sup>&</sup>lt;sup>32</sup> EA 148:41-42 reports that the king of Hazor (the Abdi-Tirshi of Letters 227 and 228) "has left his *qar* (fortified residence) and has been added with the *SA.GAZ* people." Moran interprets this as: "the king's deserting his family and aligning himself with the <sup>c</sup>Apiru" (*"Working with No Data," op. cit.*, 211). From the context it would seem that certain difficulties caused by the Habiru compelled the king of Hazor to leave his city. Recent excavations at Hazor may have uncovered the king's palace. "The absence of any later building above the core of this palace is truly surprising: City residents do not normally leave open such prime real estate ....." Amon Ben-Tor and Maria Teresa Rubiato, "Excavating Hazor Part II: Did the Israelites Destroy the Canaanite City?" *BAR* 25/3 (May/June 1999):27.

Seemingly, like Labayu, the king of Hazor was looked upon by the Canaanites as a traitor for having surrendered an unspecified portion of his kingdom, which was composed of several cities (EA 228:15-16). Hazor, which once ruled over a large region (Josh 11:10), had been reduced by a stronger power identified as the Habiru. Two extant missives from Hazor to Pharaoh Akhenaten (EA 227, 228) provide a denial by Hazor's king that he has failed to guard his city and villages.

In the biblical narrative, the city of Hazor had suffered an enormous defeat during Israel's final military campaign under Joshua. The city had been sacked and destroyed by fire. Jabin, Hazor's king at that time,<sup>33</sup> perished under the fierce onslaught (Josh 11:10-14). Yet Hazor managed to survive and thrive again as a Canaanite kingdom, as is evident from both the Amarna tablets (Letters 227 and 228) and the Bible (Judg 4:2-3). Though the Hebrew conquest initially was a success, the Israelite invasion failed to embrace some of the most important parts of the land. As already noted, Judah could not dispossess the Jebusites of Jerusalem (Josh 15:63); Ephraim failed to conquer Gezer (Josh 16:10); Manasseh left the cities of the Jezreel Valley in Canaanite hands (Josh 17:11-13); and Hazor remained a foreign enclave within Israel until her fall, some 150 years later, to the victorious army of Deborah and Barak (Judg 4:4-24).

As the Hebrews became ever stronger, they made many of the Canaanites tributary (Judg 1:28) and eventually dispossessed them. The process, however, was gradual. The time placement of the Amarna Letters<sup>34</sup> evidently fell soon after the initial Hebrew invasion, the Canaanite kings mentioned being the immediate survivors of an onslaught that slew many of their predecessors mentioned in the book of Joshua.

#### Conclusion

In conclusion, a number of questions remain to be addressed:

1. Is there any indication that an ethnic people is meant by the term Habiru? Unquestionably in some texts a specific people is meant. King Idrimi of Ala-

<sup>&</sup>lt;sup>33</sup> Jabin may have been a dynastic name for the rulers of Hazor. In the Bible the name is associated with two Canaanite kings of Hazor (Josh 11:1 and Judg 4:2). A fragment of a royal letter addressed "to Ibni," a name similar in derivation to Jabin, was discovered by excavators at Hazor. Written in Old Babylonian, it could be a reference to Ibni-Addu, (meaning "Son of the storm-god Hadad"), the 18<sup>th</sup> century B.C. king of Hazor known from the Mari archives. Wayne Horowitz and Aaron Shaffer, "A Fragment of a Letter from Hazor," *IEJ* 42 (1992):165-167.

<sup>&</sup>lt;sup>34</sup> The site of Amarna, which served as Egypt's administrative capital, was occupied about Year 6 of Akhenaten's reign and abandoned soon after Year 1 of Tutankhamun. The correspondence received at the Egyptian Amarna Court during that time stretched over a period of some 16 years, if a coregency between Amenhotep III and Akhenaten is accepted. Compare the remarks of Cyril Aldred, *Akhenaten: Pharaoh of Egypt* (London: Thames and Hudson, 1968), 204-205.

## Waterhouse: Who Are the Habiru of the Amarna Letters?

lakh spent seven years as a refugee living among Habiru people.<sup>35</sup> Pharaoh Amenhotep II includes Apiru people in a list of captive ethnic-groups.<sup>36</sup> In the Amarna Letters, Biryawaza, ruler of Damascus, writes that his army includes mercenaries from both Habiru and ethnic Sutu peoples (EA 195:27-29). Since the Biryawaza report singles out the Habiru as a particular people, in parallel-coupling with the Sutu ("the sons of Sheth," in Num 24:17), the evidence thus would favor identifying these Habiru as ethnic Hebrews.<sup>37</sup>

2. Is there any indication that the Habiru were invaders, conquering the land of Canaan? In Letter 366, the chief of the Habiru, "who rose up against the lands," is such a formidable foe that only a large coalition of armies is able to challenge the threat. In order to confront the forces of the Habiru, the Canaanites gather their forces together from a wide area; bringing with them at least 50 chariots. Included in the coalition are Jerusalem, with her southern allies, and the combined armies of the rulers of Accho and Achshaph. The result, as provided by Letter 366, is a pitched battle fought against the intruding Habiru, who clearly are invaders. This is made especially evident by the letter's closing plea: "may he [Pharaoh] send Yanhamu [the Egyptian administrator over Canaan], so that we may all wage war and [thus] . . . regain the land of the king, my lord, to its [former] borders" (lines 30-34).

3. Why is the term Habiru so often used simply as a derogatory appellation in the Amarna tablets? Perhaps an analogy would be the term "vandal." Originally an ethnic name for an East Germanic tribe that ravaged Gaul, Spain, North Africa, and sacked Rome in A.D. 455, the name became a term of opprobrium, meaning one who spoils, destroys, pillages, and robs. In similar fashion, the Amarna Age Canaanites called people "Habiru" in the same way Americans suspected of disloyalty were labelled "Commies" in the 1950s.

4. Finally, what about the Habiru mentioned in the ancient texts prior to the Amarna Age; who were they? This is a question that goes beyond the scope of the present paper. As a side note, however, it does need to be pointed out that there is a reference in the book of Genesis in which the term "Hebrew" connotes a broad sense meaning which includes all the descendants of the eponymous ancestor Eber (Gen 10:21).<sup>38</sup> Such an ethnic designation includes Peleg, Joktan,

<sup>&</sup>lt;sup>35</sup> A. Leo Oppenheim, "The Story of Idrimi, King of Alalakh," in *The Ancient Near East: Supplementary Texts and Pictures Relating to the Old Testament*, ed. James B. Pritchard (Princeton, NJ: Princeton UP, 1969, 557-558.

<sup>&</sup>lt;sup>36</sup> Wilson, "The Asiatic Campaigning of Amen-hotep II," ANET 247.

<sup>&</sup>lt;sup>37</sup> "... there is no denying that small 'Hebrew' bands were present (EA 195);" Baruch Halpern, "Settlement of Canaan," in *The Anchor Bible Dictionary* 5 (O-Sh), *op. cit.*, 1139. On the ethnic identity of the Sutu/Shasu, see Horn, "Sheth" in his *Dictionary, op. cit.*, 1026; also Yurco, *op. cit.*, 33-35.

<sup>&</sup>lt;sup>38</sup> Genesis 10:21 designates Shem as the father, that is, ancestor of all the sons of Eber. The intention of this disclosure seems to be to relate Eber to the Hebrews; the name sharing the same root. In Num 24:24, the name Eber is used collectively, designating the region settled by his descendants.

Abraham, and his brothers. Possibly the term also includes Abraham's children through his second wife Keturah, and other collateral descendants (Gen 10:25-29; 11:17-26; 25:1-5). The Apiru mentioned by Amenhotep II, along with other ethnic peoples, probably are to be included in this wider usage of the designation. Ultimately, of course, the term "Hebrew," as later used in Scripture, became restricted into the narrower classification of Jacob's descendants.

Revealingly, Joseph is called a Hebrew (Gen 39:14) who came from the land of the Hebrews (Gen 40:15). In the ancient world, all Israelites were Hebrews, but not all Hebrews were Israelites. All Hebrews were *Habiru*, but not all *Habiru* were of the stock of Jacob.

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# Ancient Near Eastern Parallels to the Bible and the Question of Revelation and Inspiration

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Archaeological discoveries made in the ancient Near East during the nineteenth and twentieth centuries have revolutionized in many ways the study of the Scriptures and raised challenging new questions for interpreters. It is now impossible to study the OT without taking into consideration such findings. The decipherment of Egyptian hieroglyphics and the ancient Sumerian, Akkadian, and Canaanite languages give us tools that make it possible to read texts written before Abram and in some cases texts composed during the lifetime of biblical writers. This wealth of material is very useful in providing historical and religious backgrounds for the interpretation of the Bible.

However, these discoveries reveal that there seems to have been a very close relation between the Israelite religious practices and the religious milieu of the ancient Near East. Consequently, the question of the uniqueness of the Israelite religion, as depicted in the OT, has become an extremely important one in scholarly circles. There are ancient Near Eastern parallels for most of the Israelite social and religious institutions and for many of its religious ideas. Those similarities become of critical importance when the question of the revelation and inspiration of the biblical text is raised.

#### **Types of Similarities**

We should expect to find many similarities between Israel and its neighbors. Linguistic similarities are unavoidable because the Hebrew language is a Semitic language closely related to other Northwest Semitic languages. For instance, it is well known that the word '*el* is used in the Canaanite literature as the proper name for the highest god, but in the Bible the Hebrew word '*el* is often used as a title for the Israelite God. This does not mean that the God of Israel is to be equated with the Canaanite '*el*. More interesting is the use of

similar phrases or titles to designate particular individuals or their functions. For instance, in Israel a prophet was at times called a "man of God" (e.g., 1 Kings 17:18, 24). An inscription on a Phoenician seal reads, "Belonging to Baal-yaton, the man of God, who depends on Melqart." Melqart was the Baal of Tyre, and this man was his prophet.<sup>1</sup> Naram-Sin, son of Sargon (ca. 2200 BC), consulted his god and introduced the answer he received by saying, "The shining Morning Star spoke from heaven thus, . . ."<sup>2</sup> This same title is applied to Jesus in the NT (Rev 22:16). The Canaanite statement, "You will be numbered among those who have descended into the earth," expresses the same concept found in Ps 88:4: "I am counted among those who go down to the pit." This points to a common poetic way of referring to the tomb.

The relation between the gods and humans, particularly the king, is in some cases very similar to what we find in Israel. When the king was attacked by his powerful enemies he said:

I lifted up my hands to the lord of h[eave]n and the lord of heav[en] answered me. [And] the lord of heaven [spoke] to me [through] seers and through messengers. [And] the lord of heaven said [to me]: "Fear not for I have [made you] king, [and] I shall sta[nd] by you and I shall save you from all [these kings who] have set up siege against you!" [The lord of heaven] spoke thus to [me, and he put all these kings to flight (?)].<sup>3</sup>

That sounds like a passage from the OT, but it is not. It was written on a votive inscription by king Zakkur of Northern Syria and dated to 758 BC. Notice how many of its ideas are also found in the OT. One of the most important ones is that the god of Zakkur, like Yahweh, gives victory to the king over his enemies. It is not only that the Israelites and their neighbors share the idea of a warrior God; they also believe that God intervenes within history and fights on behalf of his king. Notice also that phrases like "to lift up the hands," "lord of heaven," and the title "seer" are common in the OT. Very important is the use of the prophetic formula "Fear not," which is also found in the OT (Deut 20:3-4; Isa 41:13-14; 43:1-2; Jer 30:10-11).

The need for the king to rely on his god for victory is found in a hymn of Assurbanipal. He says, "Neither [. . . by] my [might] nor by the might of my bow, (But) by the st[rength and by the] might of my goddesses, did I cause the lands [disob]edient to me to submit to the yoke of Assur."<sup>4</sup> The Psalmist wrote, "I do not trust in my bow, my sword does not bring me victory; but you

<sup>&</sup>lt;sup>1</sup>E. Lipinski, "North Semitic Texts," in *Near Eastern Religious Texts Related to the OT*, ed. Walter Beyerlin (Philadelphia, PA: Westminster, 1978), 247.

<sup>&</sup>lt;sup>2</sup> Benjamin R. Forester, *Before the Muses: An Anthology of Akkadian Literature*, (Bethesda, MD: CDL Press, 1993), 1:267.

<sup>&</sup>lt;sup>3</sup> Lipinski, "Semitic Texts," 231.

<sup>&</sup>lt;sup>4</sup> Forester, 2:719.

give us victory over our enemies, you put our adversaries to shame" (44:6-7). The basic idea is the same in both texts.

According to the OT the *erem*, or wars of extermination, were ordered by God against some Canaanite cities. It is now known that pagan deities also ordered this type of war against the enemies of the king.<sup>5</sup> It has been argued that this military practice was integrated into the Israelite religion "because the *erem* helped meet its need to bring order and security to a hostile and chaotic environment."<sup>6</sup>

2. Morally Justifiable: Those who go to war intend to win at any cost, and this by itself makes the extermination of the enemy an intrinsic part of warfare. This was clearly the case in the ancient Near East. Interestingly, the Old Testament makes a special effort to demonstrate that God's command to destroy the Canaanites was not an arbitrary command, nor was it controlled by the people's expansionistic interests. God Himself provided the reason: The Canaanites were sacrificing their children to their gods, involved in sorcery and witchcraft, and consulting the spirits of the dead (Deut 18:10-12). Their moral and religious corruption had reached an intolerable level, beyond grace. This is what the Lord said to Abram hundreds of years before: "In the fourth generation your descendants will come back here, for the sin of the Amorites has not yet reached its full measure" (Gen 15:16). By the time of the conquest their sins reached "full measure." This indicates that God does pass judgment on the nations and on their commitment to moral values and proper religious practices (cf. Gen 18:20-33). God was executing judgment against sin and impenitent sinners in the land of Canaan, and the judgment was final.

A second reason is given for the exterminations of the enemies of the Israelites: If they remained in the land they would become instruments of corruption for His people (Deut 7:4). A holy people required a holy place to live in. This *erem* was God's attempt to organize a new world order based on His principles of justice and love; a land in which peace and security would prevail. Anything that could threaten the divine intention was to be totally rejected.

3. Israelites as Assistants: It is the fact that God enlists the Israelites as His instruments in this type of war that raises moral and ethical concerns. Had He used the forces of nature, very few would feel that uncomfortable. But He used war. War is an unavoidable characteristic of a fallen, sinful world. By transforming the twelve tribes of Israel into a nation with political identity and by declaring Himself to be the King of Israel, God and His people were going to be involved in warfare. Their enemies would be other nations unwilling to recognize God's moral claim on them and

<sup>&</sup>lt;sup>5</sup> See Philip D. Stern, *The Biblical erem* (Atlanta: Scholars, 1991).

<sup>&</sup>lt;sup>6</sup> Ibid., 218. The questions raised by the practice of the *erem* in the Bible are very complex, making it difficult to provide quick and comprehensive answers. However, there are several elements that we should taken into consideration when seeking possible answers. When addressing this subject we should take into consideration the teachings of the Scripture concerning God, evil, human society, and war. Simplistic solutions are to be rejected (e.g., the OT view of God is different from the one of the NT; the biblical writer was using a pagan notion that is of very little value to us). The following arguments could be helpful when dealing with the problem of the *erem* in the OT.

*<sup>1.</sup> Time Frame*: The biblical text indicates that the extermination of the Canaanites was basically limited to the period of the conquest of the land. Several times God reminded the Israelites of that important fact and their responsibility, saying to them, "When you cross the Jordan into Canaan..." (Num 33:51); "When the Lord... brings you into the land you are entering to possess..." (Deut 7:1; 12:1; 18:9). This means that the Lord did not expect the *erem* to be a permanent characteristic of Israelite warfare. One gets the distinct impression that once the conquest was over, the Israelites were only to be involved in self-defense. Therefore, there is no biblical support for the practice of "holy war" today.

In the ancient Near East the gods acted as judges. The idea that they sat on thrones to judge is a common one. In a prayer offered before performing a ritual of divination, the petitioner says, "O Shamash, lord of judgment. . . . come down to me that you may dine, that you may sit on the throne and render judgment!"<sup>7</sup> The tablet is dated to ca. 2000-1500 BC.

The incomparability of Yahweh, the God of Israel, is emphasized very often in the OT. Isaiah writes, "To whom will you compare me or count me equal? To whom will you liken me that we may be compared? . . . I am God, and there is no other; I am God, and there is none like me. I make known the end from the beginning" (46:5, 9). In the Song of Moses and Miriam we read, "Who among the gods is like you, O Lord? Who is like you?" (Exod 15:11). In a hymn to Gula, goddess of healing, she says, "I am sublime in heaven, I am queen in the netherworld, among the gods I have no peer, among the goddesses I have no equal."<sup>8</sup> In the great Hymn to Marduk we read, "Whatever the gods of all the inhabited world may have done, they cannot be like you, Lord! [] of the depth of knowledge, where is your equal?"<sup>9</sup> Once more there are conceptual and linguistic similarities.<sup>10</sup>

God's providential care for the world is expressed in a hymn to the Egyptian god Re (ca. 1365 BC) in language similar to what we find in the Psalms: [Re] "who creates the herbs that give life to the cattle, and the fruit trees for mankind. Who makes that on which the fishes in the river may live, and the birds under the heaven."<sup>11</sup> Psalm 104:14, 25, 27: "He makes grass grow for the cattle, and plants for man to cultivate, bringing forth food from the earth. . . There is the sea, vast and spacious, teeming with creatures beyond number . . . These all look to you to give them their food at the proper time." In the famous Egyptian hymn of Akhenaten to the god Aten (ca. 1365-1348), the king exclaims "How manifold are your works! They are hidden from the face (of man) . ...<sup>12</sup> The Psalmist also exclaims, "How many are your works! In wisdom you

made them all" (104:24). In spite of cultural differences, humans tend to think

<sup>11</sup> Hellmut Brunner, "Egyptian Texts," in Beyerlin, Near Eastern Religious Texts, 14.

willing to exterminate His people. Through the conquest of the land, the God of the theocracy trains His people for war in order for them to cooperate with Him in the fulfillment of His divine intentions for them and for the world (Judges 3:1-2).

We may not understand everything related to this topic, but there is one thing we know, namely, that God is a loving, kind, and just God. This biblical picture of God should be used in the discussion of a subject like the one under consideration. He is the One who in an act of love and justice will exterminate sin and impenitent sinners from our planet in order to create a peaceful and eternal kingdom.

<sup>&</sup>lt;sup>7</sup> Forester, 1:149.

<sup>&</sup>lt;sup>8</sup> Ibid., 2:494.

<sup>&</sup>lt;sup>9</sup> Ibid., 2:527.

<sup>&</sup>lt;sup>10</sup> In a polytheistic religion the superiority and incomparability of a particular deity should be interpreted in terms of the sphere over which he or she ruled. For instance, the god or goddess of war is incomparable in that particular role.

<sup>&</sup>lt;sup>12</sup> Ibid., 18.

and talk to and about God in similar ways because we all seem to share some basic universal and general perception of the work and nature of God. Therefore those religious expressions belong to the common human experience of G/god.

We also find stylistic elements that are similar to those found in the OT. For instance, the OT formula of lament and penitential prayers is also found in an Akkadian prayer to Ishtar (dated to the middle of the second millennium BC):

How long, O my Lady, are my enemies to look darkly upon me, are they to plan evil things against me with lies and deception, are my persecutors and those who envy me to rejoice over me? How long, O my Lady ...?<sup>13</sup>

Compare that with Ps 13:1-2:

How long, O Lord, will you forget me for ever? How long will you hide your face from me? . . . How long will my enemy triumph over me?

Obviously, this was a common formula of lament used in the ancient Near East to express an impatient request in the form of a prayer.<sup>14</sup>

There are many more stylistic similarities between the Israelite literature and the ancient Near East, but most of the similarities are only formal, not substantive. In the case of the wisdom literature we find similar forms as well as similar teachings. Just a couple of examples. The Egyptian Teachings of Ani, from the  $15^{\text{th}}$  or  $14^{\text{th}}$  centuries, contains the following advice:

Be on your guard against a woman from abroad, whom no one knows in the city.

She is a deep water, the extent of which no one knows. A woman whose husband is far away, says daily to you: 'I am polished (=pretty)!' when she has no witnesses. She waits and sets a trap. A great crime–and death, when it is known.<sup>15</sup>

We can identify some significant similarities with Prov 7:19-27, but no one argues that Proverbs was copying from the Egyptian document. What is described in both texts is a common human experience. Closer parallels with Proverbs are found in the Teachings of Amenemope (ca. 1186-1070 BC). For instance,

Better is poverty from the hand of God than riches in the storehouse; better is bread, when the heart is satisfied,

<sup>&</sup>lt;sup>13</sup> Hartmut Schmokel, "Mesopotamian Texts," in Beyerlin, Near Eastern Religious Texts, 110-11.

<sup>&</sup>lt;sup>14</sup> See H. Ringgren, "*Matay*," in *Theological Dictionary of the OT*, ed. G. Johannes Botterweck, Helmer Ringgren and Heinz-Josef Fabry (Grand Rapids: Eerdmans, 1998), 9:102.

<sup>&</sup>lt;sup>15</sup> Brunner, 48.

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The content is very similar to what we find in Prov 17:1; and 15:17. Notice also that this particular type of proverb, called a "better proverb," is very common in the Bible (e.g. Eccl 4). Israel and its neighbors seem to have used the same or similar literary forms to express their ideas.

Two social institutions deserve brief mention because both of them find parallels in the ancient Near East, namely kingship and the covenant. Such parallels should not surprise us, because the Israelites requested a king "such as all the other nations have" (1 Sam 8:5). Yet the Lord adapted and reformulated this institution on the basis of the covenant He made with Israel. The covenant was a common legal form in the ancient Near East, though used by the Israelites in a singular way. Many of the parallels are impressive and indicate that the biblical writers use expressions, practices, and images that are common in the ancient Near Eastern cultural context. It is therefore useful for the interpreter to get acquainted with those customs and practices, because they do help us gain a better understanding of some biblical passages.

#### Approaches to the Problem of Similarities

We have briefly touched on some of the significant types of similarities between Israel and the ancient Near East nations. Some consider the similarities to be so serious that they find it difficult to speak of the uniqueness of Israel. Two main approaches have been developed to deal with the problem.<sup>17</sup> There are those who search for concepts and behaviors that are unique to Israel; like for instance the biblical idea of monotheism and the relation of Israel to that One God. Others argue that Israel and its contemporaries shared the same pool of ideas and behaviors and that distinctiveness is to be found in the way the Israelites reconfigured or patterned those ideas and behaviors. The role of revelation and inspiration is hardly ever touched in those discussions.<sup>18</sup> The discussions

<sup>16</sup> Ibid., 54.

<sup>&</sup>lt;sup>17</sup> On this consult Peter Machinist, "The Question of Distinctiveness in Ancient Israel: An Essay," in *Ah, Assyria . . . : Studies in Assyrian History and Ancient Near Eastern Historiography*, ed. M. Cogan and H. Tadmor (Jerusalem: Magnes Press, 1991), 197-200.

<sup>&</sup>lt;sup>18</sup> An exception is Helmer Ringgren. He argues, in support of the second position, that in the area of similarities between Israel and its neighbors "The important task of research . . . is to assess the Israelite use of foreign material and the reinterpretation it underwent in the framework of Yahwistic religion" ["The Impact of the Ancient Near East on Israelite Tradition," in *Tradition and Theology in the Old Testament*, edited by Douglas A. Knight (Philadelphia, PA: Fortress, 1977), 45]. He raises the question of revelation and argues that in the OT God reveals Himself not only through His speaking but particularly through His acts in history. "It is conceivable, therefore, that pieces of Yahweh's revelation found their way into Israel through the faith of those other nations. If God is able to use the events of history to get across to his people, he might also be able to use the traditions of the people who took part in these events to make himself and his plans known to his people. Is it too bold to assume that 'pagan' thinking about God could contain sparks of truth?" (46). That elements of truth may be present among those who were not Israelites is not

are attempts to explain the origin of the Israelite religion from the perspective of sociology and the development of social institutions. But for those who consider the OT to be part of the biblical canon, it is impossible not to address the question of revelation in the context of the similarities between Israel and its neighbors.

It appears that the problem we confront is the one of developing a method that would allow us to deal properly with similarities and differences and that would acknowledge at the same time the specific character of each religion.<sup>19</sup> Some scholars have been attempting to develop such methodology. They feel that the comparative method is indeed one of the most difficult disciplines because of its natural tendency to overemphasize similarities and its inherent danger of drawing conclusions unwarranted by the evidence. However, there are a couple of things that the evidence available to us indicates, and we must keep them in mind when dealing with the issue of similarities. First, we do know that Israel shared in many ways the ancient Near Eastern culture, but we also know, secondly, that Israel appears in the history and culture of the ancient Near East as an independent entity with its own character and identity.<sup>20</sup>

The uniqueness of Israel in the context of the ancient Near East is not something modern scholars are addressing for the first time in the history of the religion of the Old Testament. The OT itself testifies to the singularity of the people of Israel in the ancient world. Peter Machinist lists 433 OT passages in which the distinctiveness of Israel is mentioned.<sup>21</sup> The diversity of the passages indicates, according to him, that the issue of distinctiveness "seems to have been an established and not unpopular preoccupation in Israel well before the advent of the canonical organizers in the sixth century B.C.E."<sup>22</sup> It was because of their uniqueness that God was to use Israel to bless the nations of the earth (Gen 12:3). Therefore, the use of the comparative method should not ignore the biblical emphasis on the singularity of Israel.

#### Guidelines for the Study of Similarities

In an attempt to set limits to the comparative method, scholars have suggested some principles to be used by those who study the similarities between

to be denied, but the problem is how to identify the non-Israelite traditions through which God was revealing Himself to His people. The only control available would be the special revelation that God Himself gave to the Israelites. Therefore, we are back to the question of what is uniquely Israelite vis-a-vis the ancient Near East.

<sup>&</sup>lt;sup>19</sup> So Helmer Ringgren, "Israel's Place Among the Religions of the Ancient Near East," *Vetus Testamentum Supplement* 23 (1972):1.

<sup>&</sup>lt;sup>20</sup> This is acknowledged, perhaps in stronger terms, by Th. C. Vriezen, "The Study of the OT and the History of Religion," *Vetus Testamentum Supplement* 17 (1969):14-15.

<sup>&</sup>lt;sup>21</sup> Machinist, 203-204. Among the passages we find Gen 26:4; 34:14-17; Exod 19:5-6; 22:20; 23:32-33; 34:10; Lev 18:3-4; Deut 4:6-8; 2 Sam 7:22-24.

<sup>&</sup>lt;sup>22</sup> Machinist, 208.

Israel and the ancient Near East. We will mention some we have found particularly useful.

First, it has been considered of utmost importance to examine differences as well as similarities.<sup>23</sup> Otherwise we would easily misinterpret the similarities. In fact the question of the uniqueness of Israel would not arise if all we had were similarities. It is because there are differences and a biblical claim to distinctive-ness that we have to raise the question of the nature of the similarities or parallels.

Second, study inter-biblical parallels before comparing the biblical text with extra-biblical materials.<sup>24</sup> If the biblical text provides other passages similar to the one discussed, it is more important to examine that parallel than to ignore it and look for ancient Near Eastern parallels to interpret the biblical text. For instance, the verb *kipper* ("to make atonement") is often used in different ritual passages in the OT. But its Akkadian cognate, *kuppuru* ("to wipe off, cleanse") is also used in different ritual acts. In order to ascertain the meaning of the verb in the Hebrew Bible, it is necessary to examine its ritual usage in the OT. Within that context *kipper* means to perform rites for the removal of sin and impurity. Sin and impurity are understood as violations of God's moral and religious laws and constitute a barrier between God and the sinner that needs to be removed. This, as we shall see, is different from what we find in the Akkadian literature.

Third, when dealing with social phenomena it is necessary to study the function of a particular phenomenon within Israel itself before engaging in comparisons with parallel phenomena in other societies.<sup>25</sup> The nature and role of the king in Israelite society must be carefully analyzed before one decides to compare this social institution with ancient Near Eastern practices. Such study will reveal significant differences and will indicate that the Israelite system was in many ways unique, in spite of similarities with other systems.

Fourth, study the ancient Near Eastern parallel in an attempt to determine what was the meaning of the idea, behaviour, or institution within its own particular setting in life.<sup>26</sup> Interpreting a piece of literature or a social and cultic practice in isolation from its immediate cultural context could result in a distortion of the evidence. Therefore, it is indispensable to take into consideration all the evidence available on a particular phenomenon before comparing it with similar ones in any other culture. Let me give you a modern example. For instance, terms like "freedom" and "liberty" were used during the cold war in communist literature as well as in American literature. But in order to under-

<sup>&</sup>lt;sup>23</sup> H. Frankfort, *The Problem of Similarity in Ancient Near Eastern Religions* (Oxford: Clarendon, 1951), 17.

<sup>&</sup>lt;sup>24</sup> Shemaryahu Talmon, "The 'Comparative Method' in Biblical Interpretation—Principles and Problems," *Vetus Testamentum Supplement* 29 (1978):356.

<sup>&</sup>lt;sup>25</sup> Talmon, 356.

<sup>&</sup>lt;sup>26</sup> Vriezen, 13; Ringgren, "Israel's Place," 1; Talmon, 356.

stand the meaning attached to those terms it was necessary to have a clear understanding of the communist and American ideologies. The terms are the same, but they differ significantly within each culture. The use of the Akkadian verb *kuppuru* provides another example. When this verb is interpreted within the Babylonian understanding of ritual acts one realizes that it is not a significant parallel to the biblical *kipper*. In that religion what was wiped off or removed was not sin but evil in the form of disease produced by demonic powers. Through magic and incantations the individual sought to be free from his or her affliction. This is different from what we find in the OT, where God Himself, in an act of love, forgives sinners and removes their sin.

Fifth, comparisons should be made with religions with which Israel comes into contact or that belong to its general cultural and geographical context.<sup>27</sup> They would probably provide the best and more reliable parallels for analysis and discussion.

#### Critical Cases and the Question of Revelation and Inspiration

These guidelines could help students by providing proper parameters within which one could do comparative studies that will hopefully avoid the "parallelomania" so common among scholars in the last century and that led many to conclude that the Israelite religion was heavily influenced by the Babylonian religion<sup>28</sup> or the Ugaritic religion (Canaanite religion). But the guidelines do not address the relation between similarities and the revelation/inspiration of the biblical text. We intend to address that question by discussing several of the most important parallels between Israel and the ancient Near East. Here we will deal mainly with two specific areas: the law and the cultic practices. We will examine the nature of the parallels and their implications for the doctrine of revelation and inspiration.

#### **Israelite Law**

We possess today a significant amount of legal materials from the ancient Near East that could be used for comparative purpose and to better understand ancient legal practices.<sup>29</sup> From the Sumerian culture we have the Laws of Ur-

<sup>&</sup>lt;sup>27</sup> Vriezen, 13.

<sup>&</sup>lt;sup>28</sup> On Pan-Babylonianism see W. G. C. Gwaltney, Jr., "Pan-Babylonianism," in *Dictionary of Biblical Interpretation*, ed. John H. Haynes, (Nashville: Abingdon, 1999), 2:233-34. He writes that the view that Babylonian culture dominated the ancient Fertile Crescent "arose around 1900 among German cuneiformists, who argued that all ancient cultures and religions with an astral mythology sprang from a common source: Babylon . . . Among the newly discovered documents were numerous religio-mythological writings suggesting that the Hebrew Bible reflected the ancient Israelite's dependence on Babylonian culture, mythology, and religion" (233). He adds that eventually the theory "faltered because of its extravagant and unsubstantiated claims" (234). See also H. B. Huffmon, "Babel und Bibel," *Dictionary of Biblical Interpretation*, 1:92.

<sup>&</sup>lt;sup>29</sup> The most recent translation of those legal materials is Martha T. Roth, *Law Collections from Mesopotamia and Asia Minor* (Atlanta: Scholars, 1997).

Namma (from the city of Ur, ca. 2050 BC), the Laws of Lipit-Ishtar, fifth ruler of the First Dynasty of the city of Isin (ca.1934-1924 BC), and several other small collections. From the Babylonians we have the Laws of Eshnunna (ca. 1700 BC), prepared by Dadusha, ruler of the kingdom of Eshnunna; the Laws of Hammurabi (ca. 1750 BC), prepared by Hammurabi, the sixth ruler of the First Dynasty of Babylon; and a collection of fifteen Neo-Babylonian Laws, dated to ca. 700 BC. From Assyria we have the Middle Assyrian Laws (ca. 1076 BC), and from the Hittite a collection of laws going back to the early Old Period (1650-1500 BC) which includes laws from the Middle and New Hittite periods (1500-1180 BC). There is a need for Adventist scholars to examine these laws and compare them with the biblical ones in order to deal with the issue of similarities and differences. Here we can only make some general comments.

We must acknowledge that the similarities between these legal materials and the biblical ones are indisputable. Take, for instance, the structure of the collections, particularly that of the Law of Hammurabi. It has a prologue in which the background of the law is given, followed by the collection of laws, closing with an epilogue.<sup>30</sup> The same structure has been identified in the case of the so called Book of the Covenant in Exod 20-23.<sup>31</sup> Casuistic law (case laws; "if such and such happens, then . . .") characterizes many of the collections, as is also the case in the biblical materials. We find in the Bible laws addressed by God to the Israelites, and often phrased as imperatives, called apodictic laws. It was believed that such laws were uniquely Israelite, but laws phrased in the apodictic style have been found among Israelites neighbors.<sup>32</sup>

If we look at some specific laws we find a number of striking similarities.

- Deut 24:7: "If a man is caught kidnapping one of his brother Israelites and treats him as a slave or sells him, the kidnapper must die."
- CH 14: "If a man should kidnap the young child of another man, he shall be killed."
- Mid. Assyrian A30: "If the father who presented the bridal gift so pleases, he shall take his daughter-in-law (i.e., the wife of his deceased son) and give her in marriage to his (second) son."
- Deut 25:5-10: "If brothers are living together and one of them dies without a son, ... Her husband's brother shall take her and marry her and fulfill the duty of a brother-in-law to her."
- Lev 18:7, 29: "Do not dishonor your father by having sexual relation with your mother. . . . . . Such persons must be cut off from their people."

<sup>&</sup>lt;sup>30</sup> W. J. Harrelson, "Law in the OT," *Interpreter's Dictionary of the Bible*, ed. George Arthur Buttrick (Nashville: Abingdon, 1962), 3:79.

<sup>&</sup>lt;sup>31</sup> Shalom M. Paul, *Studies in the Book of the Covenant in the Light of Cuneiform and Biblical Law* (Leiden: Brill, 1970), 36,

<sup>&</sup>lt;sup>32</sup> Samuel Greengus, "Law: Biblical and ANE Law," *Anchor Bible Dictionary*, ed. David Noel Freedman (New York: Doubleday, 1992), 4:245.

Hammurabi 157: "If a man, after his father's death, should lie with his mother, they shall burn them both." [In Hittite law it is not a sin for the son to have sex with her after the death of the father (HL 190).]

In the area of sexual prohibitions there are many similarities between biblical legislation and Hittite, Babylonian, and Assyrian laws. Interestingly, the biblical text states that the Egyptians and the Canaanites did not practice similar laws (Lev 18:3, 27-29), but does not say anything about Hittites, Babylonians, and Assyrians. Nevertheless, it is clear that "the Israelites were neither the first nor only people to honor such taboo."<sup>33</sup>

One more example taken from Hammurabi 199: "If he destroys the eye of a citizen's slave, or breaks the bone of citizen's slave, he shall pay half of the purchasing price." Compare it with Exod 21:26: "If a man hits a manservant or maidservant in the eye and destroys it, he must let the servant go free to compensate for the eye."

Samuel Greengus states, "The similarity between the Israelite and pagan laws is remarkable and unexpected. The language in which the respective laws were formulated is at times so close that questions have arisen as to the originality and independence of the Israelite legal traditions."<sup>34</sup>

How then should one explain those similarities? What is uniquely Israelite in the biblical legal materials? A logical conclusion would be that the Israelites took over their body of legal materials from ancient Near Eastern legal traditions. The problem scholars face with that suggested solution is that there is no way to determine how that happened. One of them has concluded that "at this stage of knowledge . . . the actual mechanisms of cultural contact and transmission still remain elusive."<sup>35</sup>

Other scholars have acknowledged the ancient Near Eastern influence on the Israelite legal tradition but have sought to demonstrate that there are some fundamental conceptual differences which make the Israelite system unique. For instance, the laws dealing with slaves are much more humanitarian in the Bible than in any other Near Eastern law. "Ancient Near Eastern law collections deal mostly with the slaves in relation to an injuring third party, thus emphasizing the slave's status as chattel. However, most biblical legislation focuses upon the relationship of slaves to their own master, thus emphasizing the slaves' humanity."<sup>36</sup> The clear tendency of the law of slavery in the Bible is "to humanize this

<sup>&</sup>lt;sup>33</sup> Greengus, 246.

<sup>&</sup>lt;sup>34</sup> Harrelson, 534

<sup>&</sup>lt;sup>35</sup> Greengus, 247.

<sup>&</sup>lt;sup>36</sup> Barry Lee Eichler, "Slavery," in *Harper's Bible Dictionary*, ed. Paul J. Achtemeier (San Francisco: Harper and Row, 1985), 959. K. A. Kitchen, "Slave," in *Illustrated Bible Dictionary*, ed. J. E. Douglas (England: InterVarsity, 1980), 3:1464, writes, "Even when the Hebrew law and custom on slaves shares in the common heritage of the ancient Semitic world, there is this unique care in God's name for these people who by status were not people, something absent from the law of the Babylon and Assyria."

institution" based on the belief that there is one Creator and that all human beings were made in the image and likeness of God. There was also the fact that Israel itself was in bondage in Egypt.<sup>37</sup>

Specific characteristics of the Israelite law have been identified as pointing to its uniqueness. First, it has been argued that, over against ancient Near Eastern law, the Israelites view their law as originating in God Himself; He is considered the only legislator in Israel. In Mesopotamia the law was the embodiment of cosmic truth, and Shamash was its custodian but not its originator. It was the function of the king to establish justice in his realm, and it was he who expressed the cosmic truth in the form of law.<sup>38</sup> Among the Israelites the law was conceived as coming directly from God.

Second, in Israel, it is suggested, the law is an expression of God's will, and therefore all crimes are considered a sin against Him and cannot be pardoned by a human agency.<sup>39</sup> All aspects of life are directly related, through the law, to the will of God. No distinction is made in the biblical legal materials between the moral, civil, and religious spheres of life. They are all considered an expression of the will of God.

Third, since it is God who personally gives the law to His people, they are directly responsible to Him and not to any individual or legislative body.<sup>40</sup> Every individual is now personally responsible to maintain justice in the land.

Fourth, biblical law is viewed as upholding the principle of the sacredness of human life and therefore as rejecting the death penalty for crimes against property.<sup>41</sup> The basic principle is that human life is more valuable than property.

These principles are indeed useful and assist us in perceiving the uniqueness of the Israelite law within the ancient Near East. But they do not provide an answer to the question of the historical origin of biblical law. They simply describe the way the Israelites conceived of their law and how it was different from other legal collections. When dealing with the issue of the origin of the biblical law, the only information we have is the one provided by the biblical text itself. The text emphasizes the fact that it was God Himself who gave those laws to the Israelites. In fact, He appeared to them on Mount Sinai and they heard His voice as He gave them the Decalogue (Exod 19:16-19; 20:1-19). The people suggested that Moses be their mediator, and the Lord said to him, "Stay here with me so that I may give you all the commands, decrees and laws you are to

<sup>&</sup>lt;sup>37</sup> Walter Zimmerli, "Slavery in the OT," in *Interpreter's Dictionary of the Bible Supplement*, ed. Keith Crim (Nashville: Abingdon, 1976), 829.

<sup>&</sup>lt;sup>38</sup> Moshe Greenberg, "Some Postulates of Biblical Criminal Law," in *Studies in Bible and Jewish Religion*, ed. Menahem Haran (Jerusalem: Magnes, 1960), 9.

<sup>&</sup>lt;sup>39</sup> Paul, 37; and Greenberg, 12.

<sup>&</sup>lt;sup>40</sup> Paul, 38.

<sup>&</sup>lt;sup>41</sup> Greenberg, 16-18.

teach them to follow in the land I am giving them to possess" (Deut 5:31; NIV).

To what extent should we take that information at face value? Should we interpret that emphasis on God as the originator of the law as a literary device whose purpose was to invest the law with authority? If it was a literary device, we do not have any precedent for it. First, in the ancient Near East the authority of the law was not grounded on its divine origin but on the authority of the king, who was also subjected to it. Second, in the Bible the law is located within and is part of a historical narrative. The text considers the giving of the law to Israel to be a historical event that took place on Mount Sinai after the people left from Egypt. The origin of the people of Israel, the moment at which the twelve tribes were constituted into a nation, and the giving of the law are inseparable. The historical moment is the same. Finally, the biblical text makes a special effort to establish the fact that it was God Himself who gave the law to His people. The Lord publicly proclaimed the Decalogue, and that event was witnessed by each Israelite. This is the only way the biblical text explains the origin of the law, and we should take it very seriously.

For a community of faith that acknowledges the divine origin of the Bible, solutions that tend to play down the plain meaning of the text become, to say the least, questionable. By assuming that perspective of faith with respect to the biblical text, the problem of the unquestionable similarities between biblical law and ancient Near Eastern law collections is accentuated. In searching for answers we must attempt to integrate as much as possible the archaeological evidence and the witness of the biblical text.

Let me suggest a way of dealing with the issue of similarities within the conceptual context of the Israelite law as a divine revelation. First, some of the similarities could possibly be explained by the simple fact that humans are social beings who seek to live in harmony in a context of social order. This requires a set of common social values expressed in norms and laws that will regulate the life of the social group. Social crimes do not vary much from culture to culture, and even the possible number of penalties to be inflicted are limited and therefore very similar. But since social values may vary, or at least the hierarchy of value may be different, we should expect to find significant similarities as well as some differences. Of course, we could also suggest that God, as Creator, provided for the human race a basic set of values and principles to regulate human behavior and that some of them have been preserved in all cultures. That would certainly explain many of the similarities.

Second, we should take into consideration the biblical tradition concerning Abram. It is a logical deduction to conclude that when he left Ur, in Mesopotamia, Abram left with the legal tradition of that area. He had been a citizen of that city, was aware of the laws regulating the different aspects of that society, and he lived by those laws. He was probably well acquainted with at least the Babylonian civil laws. Travelling throughout Palestine, he became acquainted

with the Canaanite and even the Egyptian legal traditions and possibly incorporated some of them into his own lifestyle.

Third, we should also take into consideration that according to the biblical text God made a covenant with Abram and gave him specific legal instructions (Gen 17). It is true that we do not have a record of that legal material, but it would have reflected values and principles compatible with the character of God which were to regulate the life of Abram and his descendants. Obviously this new legal material did not totally reject every aspect of the legal traditions known by Abram. Otherwise it would have been almost impossible for Abram to interact with people outside his household.

Fourth, we must acknowledge that the twelve tribes of Israel did not live in a legal vacuum before Sinai.<sup>42</sup> The legal traditions of their forefathers Abraham, Isaac, and Jacob were part of their legal heritage. Besides, they were acquainted at least with the Canaanite and Egyptian law systems. While in Egypt the Lord gave them laws regulating the Passover (Exod 12:1-30) and the consecration of the firstborn. Moses may have even initiated in Egypt a Sabbath reform (5:4-21; cf. 16:4-35). And after the Exodus, and before reaching Sinai, the Lord gave them some laws whose content is not stated in the text (15:25c-26).

Fifth, God did not uproot Israel from its cultural milieu by giving them a legal system totally and radically different from that of the surrounding nations. In order for the Israelites to be effective as God's instrument in blessing the nations of the earth, it was necessary for them to be similar and yet different from those nations. Israel was now a new nation brought into existence by the Lord in fulfillment to the promises He made to Abraham.

Finally, if we take seriously the biblical witness according to which the Israelite laws were given to them by the Lord, we would have to conclude that at Sinai God gave Israel more than a peculiar legal frame of reference based on unique principles of social and religious values. He gave them also a legal system that incorporated some of their legal heritage from the ancient Near East that was compatible with the covenant He made with them as well as new legal demands.<sup>43</sup> According to the biblical text the Israelite legal system was

 $<sup>^{42}</sup>$  W. J. Harrelson writes, "Legal and social customs reflected in the book of Genesis have appeared in a new light as a result of the recovery of compatible materials from the second millennium BC found in NW Mesopotamia....

<sup>&</sup>quot;These indications of a common legal and social tradition between the ancestors of the Israelites and the peoples of NW Mesopotamia make clear that the period prior to Exodus was not without its laws and community regulations. The ancestors of the Israelites are not to be understood as wandering nomads without any sort of legal tradition apart from that which is suited to tribal life among such nomads. It is highly probable that in the pre-Mosaic era the tribal groups from which the community of Israel was to be formed had, therefore, a fairly well-developed system of legal procedures based on customs widely prevalent in the ancient Near East" (3:78).

<sup>&</sup>lt;sup>43</sup> It is generally acknowledged that the covenant God made with Israel uses the same literary form employed in the ancient Near Eastern covenants. K. A. Kitchen comment, "At least there can be little doubt that the early Hebrews thus used a set form which was common all over the

given to the people by God Himself. It did not come into existence through a long historical process that reached its climax after the exile from Babylon. Some of the common legal traditions were modified by the Lord, making them more humane and adapting them to the spirit and intention of the covenant He made with the Israelites. The final product was indeed unique to Israel. That probably was what Moses had in mind when he said to the people: "See, I have taught you decrees and laws as the Lord my God commanded me. . . . Observe them carefully, for this will show your wisdom and understanding to the nations, who will hear about all these decrees and say, 'Surely this great nation is a wise and understanding people.' What other nation is so great as to have their gods near them the way the Lord our God is near us whenever we pray to him? And what other nation is so great as to have such righteous decrees and laws as this body of laws I am setting before you today?" (Deut 4:5-8).

#### **Cultus: Sanctuary/Temple Services**

We should expect to find some similarities between the Israelite cultus and ancient Near Eastern cultic practices. Belief in the existence of divine beings leads to worship, a worship place and system, and leaders or mediators of worship. Temples were very common in the ancient world, and we even know about sacrificial altars with four horns, like the one in the Israelite sanctuary. Evidence from Canaan shows that burnt sacrifices and peace offerings were offered to the deities.<sup>44</sup> Those two sacrifices were very common in the Israelite sanctuary/temple services. This suggests that the two languages "draw on a common heritage of sacrificial terms which have developed differently on each side."45 In fact, however, when we place the particular terminology within the broad religious context of each religion, the differences are significant. The sacrificial system in the ancient Near East seemed to have had the fundamental purpose of feeding the gods or providing for their needs, while in the Bible that particular motivation is absent and rejected (Ps 50). Sacrifices were offered as an expression of devotion to God, joy and gratitude, and to make atonement for the repentant sinner. Since sacrifice has basically been a universal religious practice of humans beings, one could postulate a common origin for it and suggest that its real intent and meaning is preserved in the Scripture through divine revelation and inspiration.

Ancient Near East and used it in a unique way-to express the relation between a people and its sovereign God, their real Great King, something which was far beyond any merely political relationship between human rulers and other states" [Ancient Orient and the Old Testament (Chicago: InterVarsity, 1966), 102].

<sup>&</sup>lt;sup>44</sup> John Gray, *The Legacy of Canaan: The Ras Shamra Texts and Their Relevance to the OT* (Leiden: Brill, 1965), 192; Baruch A. Levine, *In the Presence of the Lord* (Leiden: Brill, 1974), 8-20.

<sup>&</sup>lt;sup>45</sup> Ringgren, 33.

In the Israelite cultus humans are described as being in constant need of cleansing before approaching God, suggesting that humans are by nature unclean and sinners. A similar idea is found in an old Akkadian invocation addressed to an anonymous god: "Who is there who has not sinned against his god, who has constantly obeyed the commandments? Every man who lives is sinful."<sup>46</sup> Genesis 8:21 says, "Every inclination of his [man's] heart is evil from childhood." Apparently leprosy was viewed in both Israel and Assyria as something that prevented one from having access to the temple and from social interaction. In a vassal-treaty, dated to ca. 680 BC, during the time of Esahardon, we find the following curse: "May Sin, the light of heaven and earth, cover you with leprosy and so prevent you going in to god and kings; (then) wander like a wild ass or gazelle through the fields!"<sup>47</sup>

Hittite texts indicate that the concept of holiness was known to them. "It is used, for example, if something is to be described as belonging exclusively to a deity, primarily its divine nature, and then perhaps the territory of a hostile city which has been destroyed and dedicated to a god, and which is not to be built again (like Jericho). It is also used of temples, cultic utensils, priests, sacrifices, festivals."<sup>48</sup> This is somewhat similar to what we have in the OT, with the important difference that in the biblical cultus the concept of holiness plays a much more important role and is not just a cultic concept but carries a definite ethical content.

There are several parallels that deserve closer attention. The first one has to do with the building of the Israelite sanctuary. According to Exod 25:8-9, God showed Moses the model to be used in the construction of the tabernacle. The earthly was to be patterned after the heavenly; that is to say, the earthly sanctuary is a symbol of a transcendental reality. This idea belongs to the phenomenology of temples in the ancient Near East and in other parts of the world. Gudea, ruler of Sumer, had a dream in which was revealed to him the plan, inscribed on a tablet, for the temple for Ningursu, a warrior and fertility god.<sup>49</sup> The Babylonian creation account ascribes the construction of the temple of Marduk, the Esagila, in Babylon to the gods at the time of creation: "A likeness on earth of what he [Marduk] has wrought in heaven."<sup>50</sup> In Egypt we find a similar idea in that historical temples were conceived as having had their mythological origin at the moment of creation. "That is to say, the actual physical sanctuary is conceived to be an extension and continuity of a mythical prototype. Not

<sup>&</sup>lt;sup>46</sup> Schmokel, 108.

<sup>&</sup>lt;sup>47</sup> Ibid., 130.

<sup>&</sup>lt;sup>48</sup> Cord Kühne, "Hittite Texts," in Beyerlin, Near Eastern Religious Texts, 180 n. i.

<sup>&</sup>lt;sup>49</sup> See John Lundquist, "What is a Temple? A Preliminary Typology," in *The Quest for the Kingdom of God*, ed. H. F. Huffmon, F. A. Spina, and A. R. W. Green (Winona Lake, IN: Eisenbraun, 1983), 211; and Jeremy Black and Anthony Green, *God, Demons and Symbols of Ancient Mesopotamia: An Illustrated Dictionary* (Austin: U of Texas P, 1995), 138.

<sup>&</sup>lt;sup>50</sup> E. A. Speiser, "Akkadian Myths and Epics: The Creation Epic," in *Ancient Near Eastern Texts Relating to the OT*, ed. James A. Pritchard (Princeton: Princeton UP, 1969), 68-69.

only this, but the gods may specify the actual ground area of the sacred precinct and furnish the dimensions of the temple and its enclosure. For example, the temple of Re at Heliopolis was believed to have been planned by the god Thoth, the divine scribe and inventor of writing."51

As pointed out already, this is found not only in the ancient Near East but also in other places of the world. In the building of an ancient Japanese shrine to the sun goddess, Amateraru, she herself "gave the oracle that determined the original wood structure, which has been regularly replaced as an exact replica."52 Hindu temples are considered to be the visual expression of the cosmic force which creates innumerable forms; "it is a static model of the cosmos" or a manifestation of it.<sup>53</sup> In other words, the temple models or expresses a transcendental reality that belongs to the divine world. Even in Confucianism, in China, the temple is considered to be not just a building but is "symbolic of the perfect and rational order designed by Confucian morality.54

The idea that specific instructions for the building of earthly temples were given by the gods to humans and that therefore the building itself was a reflection of a transcendental reality seems to belong to the human religious consciousness and transcends cultural and regional boundaries. From that perspective it would be right to say that a temple is a part of our world "which shares most fully in the heavenly realm and must be fit for the god's presence. It is, as it were, a little piece of heaven on earth, or at least it corresponds to the heavenly original as an earthly replica, a mirror of its model or a microcosm of the cosmos as a whole."55

Since the understanding of a temple as a manifestation of a transcendental heavenly reality appears to belong to those intuitive religious ideas which are part of the human religious consciousness, it should not be argued that Israel took the idea from the religions of the ancient Near East. According to the biblical text this idea was incorporated into the Israelite religion at a particular time and through a divine revelation. Hence, the basic correctness of the universal conviction is reaffirmed and at the same time divested from mythological associations and from any other conceptual aberration. In the process the biblical text establishes on solid ground the reality of a heavenly counterpart to the earthly dwelling of God and validates or legitimizes the significance of the earthly.<sup>56</sup>

<sup>&</sup>lt;sup>51</sup> Nahum Sarna, Exploring Exodus: The Heritage of Biblical Israel (New York: Schoken, 1986), 202; H. Frankfort, Kingship and the Gods (Chicago: University P, 1978), 269-71.

<sup>&</sup>lt;sup>52</sup> Harold W. Turner, From Temple to Meeting House: The Phenomenology and Theology of Places of Worship (Netherlands: Mouton, 1979), 28.

<sup>53</sup> Michael W. Meister, "Temple: Hindu Temples," in The Encyclopedia of Religion, ed. Mircea Eliade (New York: Macmillan, 1987), 13:368, 373.

<sup>&</sup>lt;sup>54</sup> Nancy Shatzman Steinhardt, "Temple: Confucian Temple Compounds," in *The Encyclopedia of Religion*, 13:382. <sup>55</sup> Turner, 26.

<sup>&</sup>lt;sup>56</sup> A word would be in order concerning the architectural similarities between the Israelite temple and other ancient Near Eastern temples. It could hardly be denied that the architecture of

Another parallel that deserves attention is the ritual of the scapegoat in Lev 16. Once the cleansing of the sanctuary is finished, the sin and uncleanness of the Israelites are placed on the goat for Azazel and sent to the wilderness. Several ritual texts describing a similar rite have been found among the Hittites and Babylonians. This type of ritual is usually called an "elimination rite" whose purpose is to eliminate or remove from the community or the individual certain type of evil (impurity, pestilence, an infection, etc.). A few examples will illustrate the point.

The Hittite ritual of Pulisa prescribed a ritual to be performed when the king and his army, returning from war, were afflicted by a plague. The king was to select a man, a woman, a bull, and a ewe from the land of the enemy for the ritual. They were presented to the god or goddess who caused the plague. The king or his appointee, representing the army, transferred the plague to the victims, who were not only transporters of the evil but substitutes for the king and his army. The king prayed, "You, male God, be appeased with t[his de]corated man. But to the king, the [leaders], the ar[my, and the] land of Hatti, tur[n yourself fa]ithfully. [] But let this prisoner b[ear] the plague and carry (it) ba[ck into the land of the enemy."]<sup>57</sup>

It was believed that one of the local deities sent the evil, and the purpose of the ritual was to return it to the land of the enemy, to the place it came from. The idea of the transfer of a collective evil to a place outside the camp is present in Lev 16, but not the idea of appeasing a deity. This is understandable because in the Israelite religion there is only one God. Azazel, as a demonic figure, does not need to be appeased but defeated. The goat for Azazel is not a substitute for

the temple of Solomon includes a number of architectural elements common at that time. Lawrence T. Geraty examined the available archaeological evidence and concluded that "while the Jerusalem temple fits into a definite cultural context, at the same time there are significant and crucial differences that made Solomon's temple unique. Perhaps the most important distinction was in the way the temple functioned in Israelite theology; it was not God's palace where His human servants supplied His physical needs, but it was the bearer of His name, and thus the focus of religious attention to which prayer was directed. The Jerusalem temple was an accommodation to the needs of His people. God guided its builders (1 Chr 28:11-12; et al), not in a cultural vacuum but among the current options, to choose an arrangement that already had some meaning but one which could be modified to teach Israel how and why she was different from her neighbors" ["The Jerusalem Temple of the Hebrew Bible in its Ancient Near Eastern Context," in The Sanctuary and the Atonement, edited by Arnold V. Wallenkampf and W. Richard Lesher (Washington, DC: Review and Herald, 1981), 59]. The basic structure of Solomon's temple was the same as the Mosaic tabernacle, and there is not an exact parallel to any of them. The one that comes closest is the general plan of the Tell Tainat temple in Northern Syria (it is a tripartite house). Concerning it Geraty wrote, "Tainat's inner holy of holies is not square; its raised platform does not extend over the entire area of the room; and its columns are definitely within the portico (whereas Solomon's may or may not be). Furthermore, inasmuch as it dates to the 9<sup>th</sup> cent B.C., one cannot prove that it was not influenced by Solomon's temple, a logical assumption given Solomon's fame and influence" (55).

<sup>&</sup>lt;sup>57</sup> David P. Wright, *The Disposal of Impurity: Elimination Rites in the Bible and in the Hittite and Mesopotamian Literature* (Atlanta: Scholars, 1987), 46.

the high priest precisely because the idea of appeasement is absent from the text. Yes, there are some similarities, but when the ritual is placed within the conceptual context of each religion the differences are significant.

In another case a person is sick, and in order to remove the "evil sickness" a bowstring is attached to the hand and foot of the individual, then removed from him and attached to a mouse. The person in charge of the rite says, "I have taken away from you evil and I have put it on the mouse. Let this mouse take it to the high mountains, to the deep valleys (and) the distant ways.' She lets the mouse go (saying): 'Alawaimi, drive this (mouse) forth, and I will give to you a goat to eat."<sup>58</sup> The mouse is not a substitute but, like the biblical scapegoat, a means of transport used to remove the evil from the person by sending it away.

The best example from Babylon is found in the ritual for the purification of the temple. The officiating priest takes the carcass of a ram and "wipes the temple with the carcass of the ram. He recites the incantation for exorcizing the temple. He purifies the whole cella including its surrounding areas and then takes down the censer. The *mashmashushu* takes up the carcass of that ram and goes to the river, He sets his face westward and throws the carcass of that ram into the river."<sup>59</sup> As in Lev 16 the context deals with the purification of the temple/sanctuary. In the process of cleansing it the evil is transferred to a dead animal whose carcass is thrown into the river. So, we have the ideas of cleansing the temple and transfer and removal of evil from it. But the similarities are mainly superficial.

In the Babylonian religion what contaminated the temples was not the sin or impurity of the people but demons. These demons posited a threat to the deity, and it was necessary once a year to remove them from the temple. This was done through the carcass of the ram. The demons got attached to the flesh of the animal and were returned to the underworld from where they came. In Babylonian mythology demons dwelt in the underworld and had access to the world of the living through rivers. By throwing the carcass into the river they were sent back to their place of origin. In Israel the temple was cleansed from the sin and uncleanness of the people and not from the threatening presence of demons. However, in both cases there is a removal of evil and its return to its place of origin.

It is obvious that God was employing a common ritual practice from the ancient Near East to convey a truth that was not expressed through the performance of the ritual itself in any other religion. In other words, God selected a ritual practice and invested it with a particular meaning that was foreign to it. God was mediating new knowledge using structures of knowledge already present. He condescended to use what was available to the Israelites in order

<sup>&</sup>lt;sup>58</sup> Ibid., 57.

<sup>&</sup>lt;sup>59</sup> Ibid., 64.

to lead them beyond their cognitive limitations into a better understanding of His plan for them.

#### Conclusions

It is simply impossible to deny that there are significant parallels between the OT and ancient Near Eastern social institutions and religious and cultic practices. However, we must not exaggerate those similarities and then conclude that when the prophets were preserving for us the content of the Scriptures they were simply victims of their social and religious environment. The testimony of the Scripture itself is that God Himself was using that which was accessible to the prophets within their own cultural milieu to convey a special message to His people. Obviously, God did not remove the prophets from their own cultural context. God used common religious, cultic, and legal language but invested it with the meaning and message He wanted to communicate to His people. Therefore, it is important, in the study of the language, to give priority to the biblical text itself and then explore possible parallels.

Some of the parallels between Israel and ancient Near Eastern practices and beliefs suggest the possibility of a common origin. *Each religion expressed what was originally one basic practice or belief in a peculiar way introducing significant differences but preserving some similarities. In those cases, through divine revelation the practices or beliefs were divested of their pagan distortions in order to use them as a proper vehicle to communicate the divine message.* 

Our study of ancient Near Eastern practices and their possible relationship to the biblical text suggests that in the OT God, through His work of revelation and inspiration, dealt with ancient pagan practices in different ways and that He used them for different purposes. Among the ways God dealt with them we find the following ones:

1. Rejection and Condemnation of Pagan Ideas: A large number of ancient Near Eastern practices were rejected by God in the OT. For instance, consulting the spirit of the dead was a common religious act, but in Israel God rejected it (Deut 18:10-11). We do not know the extent of the practice of child sacrifice in Canaan, but the God of Israel opposed it as a most serious sin, an offence against Himself resulting in the extermination of the individual (Lev 20:1). The list could be lengthened, but that is not necessary. It is clear that the prophets and the people of Israel were to some extent informed about the religion of the surrounding nations, and God Himself rejected most of their religious convictions.

2. Polemics Against Pagan Ideas: At times it was not sufficient for the Lord to forbid His people to follow the practices of the Canaanites. He used the prophets to engage in a polemic attack against some of the religious practices and beliefs of the neighbours of the Israelites. God gave a specific command against the worship of images, but since the temptation was too strong for His

people, He showed in a polemic tone the absurdity of worshipping idols. Isaiah 46:6-7 provides a good example:

Some pour gold from their bags and weigh out silver in the scales; they hire a goldsmith to make it into a god, and they bow down and worship it. They lift it to their shoulders and carry it; they set it up in its place, and there it stands. From that spot it cannot move. Though one cries out to it, it does not answer; it cannot save him from troubles. (Cf. 44:9-20)

We can illustrate the same point by analyzing Hosea's attack against the Canaanite fertility cult. God revealed Himself through the prophet as the one who sent the rain, fertilized the land, and blessed His people. Israel is described as a woman who said, "I will go after my lovers, who give my food and my water, my wool and my linen, my oil and my drink.'. . . She has not acknowledged that I was the one who gave her the grain, the new wine and oil, who lavished on her the silver and gold—which they used for Baal" (2:5, 8). Yahweh, and not Baal, is the One who out of His covenant love blesses the land, the animals, and His people. Therefore, there is no need for the people of Israel to practice fertility rituals.

3. Adaptation of Social Practices: We have already seen that God did not reject everything from the surrounding cultures. Sometimes He took a religious, cultic or legal regulation or practice and redefined or re-configured it in order to communicate, in a reliable way, His will to His people, or in order simply to adapt it to the theocracy. One of the best examples is kingship in Israel. While in Egypt the king was divine and in most of the ancient Near East he was placed very close to the divine or divinized after death, in Israel the king was the Servant of the Lord, a vassal of Yahweh, the true king of Israel. The ancient Near Eastern concept of the king was taken over, but it was redefined in order to make it compatible with the Israelite faith. In fact, with respect to Israel it would be better to talk about a monarchical theocracy than about a monarchy. God never surrendered His claim and authority as King of Israel. In some other cases God tolerated social evil practices but through legislation made them more humane (e.g., polygamy, divorce, slavery).

4. Incorporation of Different Materials and Literary Techniques: At times God selected practices from the ancient Near East that were compatible with the values and principles of the covenant relationship He established with Israel. In Proverbs we have a collection of proverbs that may have been written by a non-Israelite, but the biblical writer, under the inspiration of the Spirit, incorporated them into the book (Prov 30:1-33; cf. 31:1-9). Literary techniques and forms used in Canaanite literature were also used by the prophets to express the message the Lord gave them.

By carefully studying each particular parallel we can determine which one of the previous four reactions to ancient Near Eastern practices is present in the biblical text. The meaning of a biblical text is, then, determined by its own biblical context because it is only there that we are informed about the way God used the ancient Near Eastern background. By acknowledging that God was directly involved in the process of rejecting, polemicizing, adapting, reformulating, and incorporating some of the cultural, religious, cultic, and legal practices of the ancient Near East, we can honor the divine nature of Scripture and justify the need to submit to its authority.

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# Genesis 9:1–7: Its Theological Connections with the Creation Motif

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Gen 9:1-7 is the first of a four-part divine speech to Noah and his family who survived the catastrophic Flood.<sup>1</sup> Several investigations have been done on this passage, with varied conclusions: (1) it is simply the biblical account of a post-Flood event already recorded in ANE literature, namely the *Atrahasis* and *Gilgamesh* Epics.<sup>2</sup> (2) It is inclusive of several "myths" which comprise Gen 1-11, the Primeval History.<sup>3</sup> When combined, these myths detail a "pattern of increasing evil" or "progressive moral decline."<sup>4</sup> (3) It is part of a P document characterized by "formal and prolix legal prescription."<sup>5</sup> Regardless of the

<sup>&</sup>lt;sup>1</sup>The other three pericopes are vs. 8-11; 12-16; and 17. Each is introduced by the formulaic expression,  $wayy\bar{o}$  mer  ${}^{s}l\bar{o}h\hat{m}$ , "And God said."

<sup>&</sup>lt;sup>2</sup>Joseph Blenkinsopp, *The Pentateuch: An Introduction to the First Five Books of the Bible* (London: SCM, 1992), 57, remarks, "Even a fairly casual reading of these first eleven chapters [of Genesis] will confirm that the Atrahasis pattern is reproduced, with modifications, to a quite remarkable degree." On the other hand, Gordon Wenham, *Genesis 1-15*, Word Biblical Commentary (Waco: Word, 1987), 205, has clearly delineated the sharp contrasts between the biblical and ANE accounts.

For information on these two ancient epics, see G. Larsson, "Chronological Parallels between the Creation and the Flood," VT 27 (1977): 490-492; N. P. Lemche, "The Chronology in the Story of the Flood," JSOT 18 (1980): 52-62; J. Laessoe, "The Atrahasis Epic: A Babylonian History of Mankind," Bibliotheca Orientalis 13 (1956): 90-102; W. G. Lambert and A. R. Millard, Atrahasis (Oxford: Clarendon, 1969); W. L. Moran, "Atrahasis: The Babylonian Story of the Flood," Bib 52 (1971): 51-61; and J. H. Tigay, The Evolution of the Gilgamesh Epic (Philadelphia: U of Philadelphia P, 1982).

<sup>&</sup>lt;sup>3</sup>Cf. Herbert Wolf, *An Introduction to the Old Testament Pentateuch* (Chicago: Moody, 1991), 81, who says, "It is common among scholars to relegate Genesis 1-11 to the realm of mythology and to consider chapter 12 as the start of the historical section . . . ."

<sup>&</sup>lt;sup>4</sup>Susan Niditch, *Chaos to Cosmos: Studies in Biblical Patterns of Creation* (Atlanta: Scholars, 1985), 66.

<sup>&</sup>lt;sup>5</sup>Hermann Gunkel, *The Stories of Genesis*, trans John J. Scullion, ed William R. Scott (Vallejo, CA: Bibal Press, 1994), 110.

scholarly debate, we can agree with Joseph Blenkinsopp that there is a correspondence between the events prior and subsequent to the Flood.<sup>6</sup> He concludes, "We are therefore invited to interpret each in the light of the other, an invitation taken up, somewhat surprisingly, by few exegetes."<sup>7</sup> It is this writer's desire to take up that invitation and demonstrate the theological connections with the Creation motif.

#### **Literary Study**

**Literary Context.** Gen 9:1-7 is located within a broad section in the book of Genesis that details the family history or " $t\hat{o}ld\bar{o}th$ " of Noah and spans 6:9-9:29.<sup>8</sup> This entire section follows the pattern of an extended chiasmus:<sup>9</sup>

General introduction: 6:9-12 Noah and his generations

A 6:13-21 First divine speech. Addressed to Noah and preceded by reflections on Noah and mankind's behavior (vs. 9-12).

God's resolve to destroy the earth.

**B** 6:22 Noah's action: Obedience to God

- C 7:1-4 Second divine speech: "Come *into* the ark"
  - **D** 7:5-16 Noah's action and beginning of the Flood
    - **E** 7:17-24 The rising Flood
    - F 8:1a God remembered Noah
    - E' 8:1b-5 The receding Flood
  - **D**' 8:6-14 Noah's action and the drying of the Earth
- C' 8:15-17 Third divine speech: "Come *out* of the ark."

B' 8:18-20 Noah's action: Offerings to God

A' 9:1-17 Fourth divine speech. Addressed to Noah and preceded by "reflections" within the heart of God Himself; that is, He resolves not to destroy mankind and the earth (8:20-22).

General conclusion: 9:18-29 Noah and his sons

<sup>&</sup>lt;sup>6</sup>Blenkinsopp, 57-58. He regards the Flood as the "decisive event" in the structure of Gen 1-11. <sup>7</sup>Ibid., 58.

<sup>&</sup>lt;sup>8</sup>The *tôldōth* is a characteristic of Genesis and is found in 2:4; 5:1; 6:9; 10:1; 11:10, 27. For an extended discussion on the use of this expression in a formulaic manner, see Jacques Doukhan, *The Genesis Creation Story: Its Literary Structure*, Andrews University Doctoral Dissertation Series, vol 5 (Berrien Springs, MI: Andrews UP, 1978), 249-262. P. J. Wiseman, *Ancient Records and the Structure of Genesis: A Case for Literary Unity* (Nashville: Thomas Nelson, 1985), 59, describes *tôldōth* as "the master key... that underlies the structure of the book of Genesis..."

<sup>&</sup>lt;sup>9</sup>Adapted and modified from Gordon Wenham, *Genesis 1-15*, Word Biblical Commentary (Waco: Word, 1987), 156. (Hereafter *Genesis*). Cf. Idem, "The Coherence of the Flood Narrative," *VT* 28 (1978): 336-48; Bernhard W. Anderson, "From Analysis to Synthesis: The Interpretation of Gen. 1-11," *JBL* 97 (1978), 38; Isaac M. Kikawada and Arthur Quinn, *Before Abraham Was: The Unity of Genesis 1-11* (Nashville: Abingdon, 1985), 104. They adapt Wenham's analysis and contend that this structural unity provides excellent evidence for the coherence of the Genesis Flood story while dispelling the interpretation of the documentary hypothesis.

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Note carefully that **A** and **A**' are alike in that both are lengthy monologues addressed to Noah, who is passive in both scenes, the recipient of the divine word. The vocabulary of both scenes is distinctive. The phrases "to ruin all flesh" (6:13; 9:11), "confirm my covenant" (6:18; 9:9), "fill the earth" (6:13; 9:1) and "to eat" (6:21; 9:3), occur only in these two scenes. Further, these are the only scenes concerned with violence (6:11,13) and bloodshed (9:5-6). Finally, there is the striking inversion that characterizes the whole Flood story: before the flood the world is doomed to destruction; afterward, its preservation is guaranteed.<sup>10</sup>

Gen 9:1-7, like the other divine speeches, is introduced by  $wayy\bar{o}$ -mer. The pericope denotes God's blessing on mankind and His resolve not to destroy the earth and its inhabitants. God does not intend for violence<sup>11</sup> to fill the earth, as in section A of the chiasm. Instead, the earth is to be filled and repopulated, with decrees intended to limit human and animal violence. Noah emerges in the post-Flood era as a new Adam, the head of a new humanity, the recipient of the renewed commission to fill and repopulate the earth (9:1). Hence, the definitive focus of the pericope is to portray the "new beginning" of world history. The blessing of God allows humanity to entertain a new hope, the continuation of history. This comes on the heels of 8:21-22, which promises "that the rhythm of life shall never again be interrupted as long as the earth lasts."<sup>12</sup> The section dramatizes mankind poised on the brink of a new civilization, initiated by the blessing of God (9:1).

**Structure**. Two broad outlines, identified by the style of writing,<sup>13</sup> may be signified:

A. Prose in vs. 1-5 B. Poetry in vs. 6-7

Within each section there are specific poetic devices. For example, in the Prose section, v.1 is characterized by repetition of imperatives ("be fruitful," "multiply," "replenish" the earth); in vs. 2-3, alternative verbs "to be" and "to give" form the sequence AB:A'B'; vs. 4-5 contain restrictions introduced by 2ak. These verses also contain a word-play. The word *nepeš* is used here in three different senses:  $b^e napš\delta$  ("with the soul"), meaning, together with the element

<sup>&</sup>lt;sup>10</sup>Wenham, Genesis, 155.

<sup>&</sup>lt;sup>11</sup>Violence denotes any anti-social, unneighborly activity. It refers to cold-blooded and unscrupulous infringement of the personal rights of others, motivated by greed and hate and often making use of physical violence and brutality. H. Haag, "*chamas*," *Theological Dictionary of the Old Testament*, ed. G. Johannes Botterweck and Helmer Ringgren, trans. David E. Green (Grand Rapids: Eerdmans, 1980), 4:482.

<sup>&</sup>lt;sup>12</sup>Claus Westermann, *Genesis 1-11: A Commentary*, trans. John J. Scullion (Minneapolis: Augsburg, 1984), 461. (Hereafter, *Genesis*).

<sup>&</sup>lt;sup>13</sup>On the level of content one may detect two sections: (1) what God gives to mankind (vs. 1-3); and (2) what God requires of mankind (vs. 4-7). See H. C. Leupold, *Exposition of Genesis* (Grand Rapids: Baker, 1953), 327.

of life therein;  $l^e nap \bar{s} \bar{o} th \hat{e} khem$  ("unto your souls"), signifying, "that which is in you, of yourselves" (rendered "your own");<sup>14</sup> and <sup>2</sup>*eth-nepeš*  $h \bar{a}^2 \bar{a} dh \bar{a} m$  ("the soul of man"), connotes his actual life.<sup>15</sup>

In the poetic section v. 6a depicts a chiasm of the ABC:CBA pattern (which will be addressed below). Also, v. 7 demonstrates parallelism: "Be fruitful and multiply" is in synonymous parallelism to: "Bring forth abundantly . . . and multiply." Note too, that the same imperative form is used.

This genre of divine speech, part prose, part poetry, is carefully structured with the express intent of heightening the theological emphases of the passage.

#### Theology

Several theological motifs are present in this passage, but let us examine four.

**Theology of Creation (vs. 1, 7).** This is the third time God has blessed mankind (1:28; 5:2), but only the second time this blessing is associated with the command to "be fruitful and multiply" (cf. 1:28). This first sentence repeats Gen 1:28 word for word.<sup>16</sup> In fact, the accounts are linked semantically and theologically.<sup>17</sup>

<sup>&</sup>lt;sup>14</sup>This term may be seen as a circumscription of the genitive, which places emphasis on the suffix "your." Hence, the stress of v. 5 is "your blood, your own blood," in contrast to the animals. It may be well to render the expression as "according to your persons," that is, "individually." See J. Skinner, *A Critical and Exegetical Commentary on Genesis*, 2d ed., International Critical Commentary (Edinburgh: Clark, 1930), 170.

<sup>&</sup>lt;sup>15</sup>U. Cassuto, *A Commentary on the Book of Genesis*, trans. Israel Abrahams (Jerusalem: Magnes, 1964), 2:127.

<sup>&</sup>lt;sup>16</sup>In v. 7 the BHS emendation of *rbh* ("to multiply"), to *rdh* ("to rule") (cf. 1:28) is unjustified. C. J. Ball first did this emendation. See his, The Book of Genesis: Critical Edition of the Hebrew Text Printed in Colours, ed. P. Haupt, The Sacred Books of the OT (Baltimore: Johns Hopkins Press, 1896), 55. He based his decisions on the Tischendorf-Nestle edition of the LXX, which renders the word rbh as katakurieusate rather than by plethunesthe. This quickly gained acceptance. See Skinner, 171; Gerhard von Rad, Das erste Buch Mose: Genesis kapitel 1-12:9, 2d ed. (Gottingen: Vandenhoeck & Ruprecht, 1964), 107; E. A. Speiser, Genesis, Anchor Bible (Garden City, NY: Doubleday, 1964), 57. Careful investigation, however, shows that the best critical editions of the LXX support the MT. For example, the eclectic text in the edition of Genesis of A. Rahlfs, ed., Septuaginta Societalis scientorum Gottingensis aucttoritate, I (Stuttgart: Wurttembergische Bibelanstalt, 1935), 68, uses *plethunesthe*. A similar reading is found in the Larger Cambridge Edition of A. E. Brooke and N. McLean based upon the Alexandriunus for Gen 1:1-46 (28). The same reading is found in the Septuagintal papyrus, the so-called "Berlin Genesis." See H. A. Sanders and C. Schmidt, The Minor Prophets in the Freer Collection and the Berlin Fragment of Genesis (New York: Macmillan, 1927), 288f. Furthermore, in Gen 1:28, mankind is told to subjugate and govern/rule the earth and animals. Both imperatives go together, for they indicate the idea of the responsibility of rulership and control. In 9:7, however, rbh is used in association with srs, both of which convey the idea of repopulation and regrowth. Hence, the emendation is not necessary.

<sup>&</sup>lt;sup>17</sup>See Wenham, Genesis, 192.

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- 1:28 "God blessed and said, 'Be fruitful and multiply and fill the earth.""
- 9:1 "God blessed and said, 'Be fruitful and multiply and fill the earth.'"

1:28 "rule ... every living creature"
9:3 "The fear and dread of you on everything"
1:28 "I have given you ... for food"
9:3 "... yours to eat, as I gave you the green vegetation"

1:27 "God created man in His image"

9:6b "in the image of God He made men"

Hence, the main theological point of Creation is clearly established semantically, in that the express language of Creation is used. Here, as in the Creation account, God blesses (cf. 1:22, 28; 2:3; 5:2). Divine blessing is one of the great unifying themes in Genesis. God blesses sea creatures and birds (1:22), mankind (1:28), the Sabbath (2:3), Adam (5:2), Noah (9:1), and the Patriarchs (12:3; 17:16, etc.).

This blessing is most obviously visible in the gift of children, as this is coupled with being "fruitful" (cf. 1:22, 28; 9:1,7). So the word of blessing, pronounced by God, guarantees the end result. Further, the divine imperatives, here repeated (9:1,7), emphasize the divine promise that they can be effected. The repetition serves the theological function.

The vocabulary of the passage also betrays a theological awareness of Creation. The verb *prh* ( $p\bar{a}r\bar{a}h$ ) is used twenty-nine times in the Old Testament, fifteen times in Genesis alone. It means generally "to be fruitful." The word  $r\underline{b}h$  is used over 200 times in the Old Testament. It generally means "to multiply," "to increase," "to be many." It has a wide range of meaning, showing its latitude. Both *prh* and  $r\underline{b}h$  are frequently found together (cf. 1:28; 17:6, 20; 28:3; 41:52; 48:4), and especially when used with the Patriarchs, they are concerned with the promise to increase. Outside of the Pentateuch, this formula is used in Jer 3:16, 23:3, and Ezek 36:11, within the context of the promise to increase the people after their restoration and renewal. They also occur in the Psalms (128:3; 107:38) and in the Prophets in the context of the promise of blessing.<sup>18</sup>

It also appears that the writer is deliberately exploiting the phonetic similiarity of the terms "bless" (*brk*), "be fruitful" (*prh*) and "multiply" (*rbh*) by juxtaposing them.<sup>19</sup>

Furthermore, similar repetition is found in 9:7. Here, the verbal sequence is  $\mathbf{a} \rightarrow \mathbf{b} \rightarrow \mathbf{c} \rightarrow \mathbf{b}$ : "be fruitful" (**a**) and "multiply" (**b**); "swarm the earth" (**c**) and

<sup>&</sup>lt;sup>18</sup>See Westermann, *Genesis*, 140-141. See also A. Yegerlehner, "Be Fruitful and Multiply and Fill the Earth.' A History of the Interpretation of Gen. 1:28a and Related Texts in Selected Periods" (Ph.D. diss., Boston University Graduate School, 1975).

<sup>&</sup>lt;sup>19</sup> For further discussion, see Josef Scharbert, "*brk*," *TDOT*, 2:279-308; Claus Westermann, *Blessing in the Bible and Life of the Church*, trans. Keith Crim (Philadelphia: Fortress, 1978).

"multiply" (**b**).<sup>20</sup> Here we see an example of multiple coordination where four clauses are naturally paired. Each pair is a hendiadys: "be fruitful" (**A**) and "multiply" (**B**); "swarm" (**C**) and "multiply" (**D**). The pattern of this grouping is as such: A and B, C and D. Each pair can amount to a composite description of a single action. For example,  $p^e r \hat{u} \, \hat{u} r^e \underline{b} \hat{u}$ , "increase and multiply," means "be abundantly fruitful."<sup>21</sup> This expression forms an inclusio with v. 1. We may also note that "the first time  $\hat{u}r^e\underline{b}\hat{u}$  (and multiply) forms part of the compound expression  $p^e r \hat{u} \, \hat{u}r^e\underline{b}\hat{u}$  (be fruitful and multiply), it signifies the raising up of seed; the second time it is used by itself, and its primary use is to increase numerically."<sup>22</sup>

Perhaps this repetition of the divine command, echoing the earlier commands (1:26, 28), "makes it probable that the Bible *consciously rejected* the underlying theme of the Atrahasis Epic, that the fertility of man before the Flood was the reason for his near destruction."<sup>23</sup>

Other key words which reflect the theological concept of Creation and the blessing are "fill" ( $ml^{2}$ ) and "swarm" ( $\delta r s$ ). The verb "to fill" is the third word that explains the blessing (v. 1). The same three-verb sequence is in Gen. 1:22 and 1:28: "Be *fruitful*, and *multiply*, and *fill* the earth". Used about 249 times in the Old Testament, the verb "to fill" ( $ml^{2}$ ) primarily denotes a spatial signification.<sup>24</sup> Used with the imperatives, "be fruitful and multiply," the imperative "fill the earth"<sup>25</sup> declares an increased point of abundance which belongs directly to the promise.<sup>26</sup>

Usually, the stem "to swarm" (cf. 1:20), used only 14 times, refers to the swift motion of small animals, as a teeming, prolific multitude.<sup>27</sup> As used in Gen 9:2, however, it is in contradistinction to small animals, because the subject refers to human beings (*'attem*, "you"), referring to Noah and his sons. In this manner, the use of this word "swarm" illustrates tremendous abundance. Exod 1:7, where the same verb roots are used as here, well illustrates the point: "The

<sup>26</sup>Westermann, Genesis, 141.

<sup>&</sup>lt;sup>20</sup>See B. Porten and U. Rappaport, "Poetic Structure in Gen. 9:7, *VT* 21 (1971): 368. Many examples of this structure occur in Hebrew poetry. Cf. J. S. Kselman, "The ABCB Pattern: Further Examples," *VT* 32 (1982): 224-229.

<sup>&</sup>lt;sup>21</sup>Francis I. Andersen, *The Sentence in Biblical Hebrew* (The Hague & Paris: Mouton, 1974), 99, 117.

<sup>&</sup>lt;sup>22</sup>Cassuto, 129.

<sup>&</sup>lt;sup>23</sup>Wenham, *Genesis*, 166; A. D. Killmer, "The Mesopotamian Concept of Over-population and Its Solution as Reflected in the Mythology," *Orientalia* 41 (1972): 174-175.

<sup>&</sup>lt;sup>24</sup>Cf. Walter C. Kaiser, "*mālē*<sup>2</sup>," *Theological Wordbook of the Old Testament*, ed. R. Laird Harris (Chicago: Moody, 1980), 1:505.

<sup>&</sup>lt;sup>25</sup>In the OT, the use of '*ereş*, "earth," "land," usually points to universality and limitless space. It is not a confined area. However, '*ädāmāh*, "land," is usually used when a delimited area is designed. See Leonard J. Coppes, "'*ädāmāh*," *TWOT*, 1:10-11; Victor P. Hamilton, "'*ereş*," *TWOT*, 1: 74-75.

<sup>&</sup>lt;sup>27</sup>The word *rāmas* is to some extent synonymous, but has a distinct difference by designating animals as a creeping, crawling, wiggling mass.

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children of Israel were *fruitful* and *increased abundantly* (lit. "teemed") and *multiplied* and the land was filled with them."

**Theology of Humanity's Dominion over Animals** (v. 2). This dominion had already been given to mankind at creation (1:26, 28). Adam and Eve were to rule or govern (*rdh*) the animal kingdom. This does not refer to "unbridled exploitation and subjugation of nature,"<sup>28</sup> since the animals were viewed as people's companions (2:18-20). Besides, Noah was given the responsibility to preserve the lives of animals from destruction during the Flood (6:20; 7:3). Here, however, people's dominion is described in terms of the "dread and fear" on the part of all animals toward people.<sup>29</sup>

The expression, "the fear of you and the dread of you," which occurs only once in Genesis, is distinct military terminology (cf. Deut 11:25). It reflects the animosity between humanity and the animal world, consequent to the Fall. This enmity was lacking in the original mandate to "have dominion over them" (1:26).

Again, the expression "into your hands they have been given," expresses the signification of deliverance in the absolute control of another, to be dealt with as the other determines (cf. Deut 19:12; 20:13; Lev 26:25; Job 1:12).<sup>30</sup> C. F. Keil and F. Delitzsch comment:

Inasmuch as sin with its consequences had loosened the bond of voluntary subjection on the part of the animals to the will of man . . . it was only by force that he could rule over it. By that "fear and dread" which God instilled into the animal creation.<sup>31</sup>

**Theology of Dietary Laws (vv. 3-4).**<sup>32</sup> This, too, reflects Creation in that both accounts deal with the diet of the people. In Gen 1:29, however, people are permitted to eat only plants and their produce. Now meat is permitted, as indicated by the expression "every moving thing that is alive" (v. 3), namely, animals, birds, and fish, all of which were given into his hand. This is further amplified by the alternation of the verbs "to be" and "to give" into an AB:A'B'

<sup>&</sup>lt;sup>28</sup>Wenham, Genesis, 33.

<sup>&</sup>lt;sup>29</sup>The phrase, "the fear of you and the dread of you," is an example of hendiadys, with the suffixes acting as objective genitives.

<sup>&</sup>lt;sup>30</sup>Westermann, *Genesis*, 462, indicates that this is the language of Holy War.

<sup>&</sup>lt;sup>31</sup>C. F. Keil & F. Delitzsch, *Comentary on the OT: The Pentateuch*, trans. James Martin (Grand Rapids: Eerdmans, 1952), 152. For a wider discussion of this theological point, see D. K. Jobling, "And Have Dominion': The Interpretation of OT Texts Concerning Man's Rule Over Creation (Gen 1:26, 28; 9:1-2; Ps 8:7-9) From 100 B.C. to the Time of Nicea" (Ph.D. diss., Union Theological Seminary, 1972). In association, see Doukhan, 47, note 1.

<sup>&</sup>lt;sup>32</sup>Verses 3-4 give an example of exclusive sentences where the lead clause states a general rule and the exclusive clause states a limiting exception, with negation. The conjunction in these cases, as here, is *'ak*, and is equivalent to the adversative "however." Hence, we may translate, "I have given you everything; however, flesh with *its life, its blood*, you shall not eat." We must also note the apposition of "its life" to "its blood." The effect is to specifically detail the limitation incurred. See Andersen, 173.

sequential pattern, thus showing the relationship between vs. 2 and 3. Hence, humanity's dominion over the animals extends to the concession of eating meat. Further, the expression, "that is alive," (v. 3) precludes as edible any animal that has died of natural causes (cf. Lev 11:40; Deut 14:21).<sup>33</sup>

Although the distinction between clean and unclean is not given, the frequent mention and distinction between clean and unclean animals made elsewhere within the same broad fixtures of the story (7:2; 8:20), "makes it problematic to assert that total freedom is being given here."<sup>34</sup>

Furthermore, God is the one who gives mankind not only plants and their produce, but also animal flesh. J. Milgrom contends that "whereas the subject of *nātan* is God, it means 'bestow, appoint, assign' (Num 8:10; 18:8; Lev 6:10; 7:34; Gen 1:29)."<sup>35</sup> Further, the context is always that of God effectively blessing.<sup>36</sup> Therefore, one sees a dilemma in that the gift of blessing that is here bestowed includes the permission to kill for food. It is this tension that necessitates the restriction of v. 4: "Surely flesh with its life, its blood, you shall not eat." The prohibition is introduced by the particle '*ak*, "surely, indeed." This is used in legal texts to show important restrictions.<sup>37</sup>

The injunction is strong in that there is to be expressly no eating of blood, the reason being that blood is associated with life.<sup>38</sup> Or put another way, blood is the constitutive element of life. Here  $nepes^{39}$  is in apposition to dam, indicating that life is equal to the blood. Elsewhere in Genesis  $nepes^{30}$  is also associated with life. In 2:7 the man is described as a living being after God gave the breath of life. Hence, the prohibition from eating "flesh with its life in it" is an inherent, implicit call to attention for the respect and sanctity of life. As Wenham comments, "It is easy to see why blood is identified with life: a beating heart and a

<sup>&</sup>lt;sup>33</sup>Wenham, Genesis, 192.

<sup>&</sup>lt;sup>34</sup>Ibid., 193. See also L. Dequeker, "Green Herbage and Trees Bearing Fruit (Gen. 1:28-30; 9:1-3): Vegetarianism or Predominance of Man over Animals?" *Bijdragen* 38 (1977): 118-127.

<sup>&</sup>lt;sup>35</sup>J. Milgrom, "A Prolegomenon to Lev 17:11," *JBL* 90 (1971): 150.

<sup>&</sup>lt;sup>36</sup>Westermann, Genesis, 463.

<sup>&</sup>lt;sup>37</sup>T. Muraoka, *Emphatic Words and Structures in Biblical Hebrew* (Jerusalem: Magnes, 1985), 130.

<sup>&</sup>lt;sup>38</sup>The prohibition of eating flesh with its blood is enjoined several times in the Pentateuch (Lev 3:17; 7:26; 17:10-24; Deut 12:23-24). This is expressly because the blood is the life; it must be poured out and covered before the flesh is consumed. Furthermore, Lev 17:11 advocates that the blood is special because it is for the making of atonement. The penalty for eating blood is explicit: krt, "to cut off" (Lev 7:27; 17:10, 14). It implies death, some sort of outlawry, perhaps banishment or ostracism.

<sup>&</sup>lt;sup>39</sup>The term *nepeš* is very common in the OT (754 occurrences) and has a wide range of meaning, including, "appetite, throat, person, self, corpse, soul, life," among others. See Edmond Jacob, "*Psyche,*" *Theological Dictionary of the New Testament*, ed. Gerhard Friedrich, trans. & ed. G. W. Bromiley (Grand Rapids: Eerdmans, 1974), 9:617-631; W. H. Schmidt, "Anthropologische Begriffe im AT," *EvT* 24 (1974):374-388.

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strong pulse are the clearest evidence of life. Respect for life, and beyond that, respect for the giver of life, means abstaining from blood."<sup>40</sup>

The injunction is further highlighted by the numerous texts insisting that blood should be drained out of an animal before consumption (Lev 3:17; 7:26-27; 17:10-14; 18:26; Deut 12:16-24; 1 Sam 14:32-34).

**Theology of the Sanctity of Human Life (vs. 5-6).** This theological idea is introduced by the restrictive particle ak, as in v. 4. Hence, both verses are interrelated. However, although the blood of animals may be shed but not partaken (v. 4), the blood of a person is never to be shed (v. 5).<sup>41</sup>

Verse 5 displays a stylistic device by placing emphasis on the verb "to require, demand" (drš). Westermann outlines it like this:<sup>42</sup>

But: Your own blood from all animals	will I demand will I demand it
and from human in turn	
the life of a person	will I demand.

The key word here is *drš*. This root is attested in many Semitic languages: Aramaic, Arabic, Ethiopic and Syriac. It is used about 165 times in the Old Testament, especially in the qal form. Basically it connotes "to seek," "to ask, or "to demand." Yet there is variation according to context. Hence, the many nuances: "demanding," "avenging," "investigating," "searching," or "striving for." It is frequently used in contexts suggesting an element of activity, action, and energy (Deut 23:6; Est 10:3; Ps 38:13). Specifically, the root is used in legal terms in the Old Testament. This is the realm of judicial inquiry, as in Gen 9:6. Hence, it indicates the activity of "requiring," "avenging," or seeking recompense.<sup>43</sup>

While Westermann's analysis correctly highlights the repetition of the verb, it fails to observe the three prepositional phrases, each introduced by *miyyad*, which emphasize the movement from the general to the specific:

(1) Divine reckoning is first demanded "from the hand of every wild animal." God requires or demands an account from the beasts, that is, the animal world at large. Any beast that kills a person, its life was forfeited. Exod 21:28-29 illustrates this fact by signifying that an ox that gores a man is to be summarily killed.

<sup>&</sup>lt;sup>40</sup>Wenham, *Genesis*, 193. The prohibition of eating blood has profoundly influenced Moslem thought. As such, strict ritual is used in slaughtering animals. This ritual is known as the *dhaka'a*. It takes into account the proper subjects for ritual slaughter; who may perform the slaughter; and how the slaughter is to be done. Cutting off part of an animal before it is dead is expressly forbidden. See *Kur'an* 5:4; 6:147. Cf. G. H. Bousqnet, "*DhABIHA*," *The Encyclopedia of Islam*, ed B. Lewis, Ch. Pellat and J. Schacht (Leiden: Brill, 1965), 2:21-214; M. Robinson, "*GHIDA*," *ibid.*, 2:1067-1072.

<sup>&</sup>lt;sup>41</sup>K. Koch, "Der Spruch Sein blut Bleibe Auf Seinem Haupt und Die Israelitsche Auffassung vom vergossenen Blut" *VT* 12 (1962): 409-410.

<sup>&</sup>lt;sup>42</sup>Westermann, *Genesis*, 466.

<sup>43</sup>S. Wagner, "Dārash," TDOT, 3: 293-307.

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(2) Accountability from human beings in general is specified in the expression "from the hand of the man" (*miyyad*  $h\bar{a}^{2}\bar{a}d\bar{a}m$ ).

(3) In distinction to this generic description, the third clause, "at the hand of every man, his brother,"<sup>44</sup> expresses the responsibility of each individual. Evidently, the text is emphasizing the nature of what is being "sought." It is human life, and nothing less, that is demanded in light of the nature of the crime.<sup>45</sup> Divine reckoning calls for the life of the person who expressly commits murder. Keil and Delitzsch comment: " $\bar{a}h\hat{v}$  here is not just the colorless 'another'; it carries the full meaning of brother. Murder is the ultimate violation of the brotherly relationship of humankind."<sup>46</sup>

Significantly, this is the first time that "brother" is used since Gen 4, where the word is used repeatedly to emphasize the wrong act of Cain. So it is probable that this story is here lurking in the background. As such, Cassuto indicates, "Whoever takes human life is like Cain. [Therefore] how much more so shall I require a reckoning for the blood of man in this instance, seeing that the slain person is the brother of the slayer."<sup>47</sup>

The three-fold injunction demanding a reckoning is now specified in v. 6. The first part (6a),<sup>48</sup> exhibits a chiasm, word for word, of the ABC:CBA type:

A The one who <i>pours</i> out	C by man
<b>B</b> the blood	<b>B</b> his blood
C of man	C will be <i>poured</i> out. <sup>49</sup>

The key verb here is  $\bar{s}\bar{a}pak$ . It is used 113 times in the Old Testament and basically means "to pour out" or "to empty." It is used when water, broth (Exod 4:9; Jud 6:20) or blood is poured out, this being its most frequent usage. Its common synonym,  $y\bar{a}saq$ , is never used with the shedding of blood. Hence,  $s\bar{a}pak$ , as used in Gen 9:6, implies willful murder or the deliberate taking of

<sup>&</sup>lt;sup>44</sup>The brevity of the Hebrew *miyyad `ish `ahîv* causes difficulty. Sometimes *`ish* is used to express the idea of "each" or "every." In a few passages, *`ish*, in this sense, is placed for the sake of emphasis before the governing noun (always a substantive with a suffix). Thus, *miyyad `ish `aĥîv*, according to the explanation, stands for *miyyad `āĥîv `ish*, that is, "at the hand of the brother of every man." It is more likely, however, that the substantive is in apposition to *`ish* (MT); thus, "at the hand of every man, his brother." See *Gesenius' Hebrew Grammar*, ed. & enl. by E. Kautzsch; 2d Eng. ed. rev. A. E. Cowley (Oxford: Clarendon, 1910), 448 (139c).

<sup>&</sup>lt;sup>45</sup>Lloyd M. Barre, "The Poetic Structure of Gen. 9:5," ZAW 96 (1984): 101-104.

<sup>&</sup>lt;sup>46</sup>Keil & Delitzsch, 152-53.

<sup>&</sup>lt;sup>47</sup>Cassuto, 127.

<sup>&</sup>lt;sup>48</sup>There is variation in the interpretation of v. 6a. According to Westermann, *Genesis*, 467, G. von Rad calls it "an extremely ancient sentence from social legal terminology." G. Liedke, "Gestalt and Bezeichmung alttestamentlicher Rechtassatze," *WMANT* 39 (1971): 117, sees it as associated with apodictic law and distinguishes it from both casuistic law and prohibitions.

<sup>&</sup>lt;sup>49</sup>Blenkensopp, 85, describes this as "the enunciation of a legal principle, a sentence of law, in gnomic style and chiastic form. . . ." S. E. McEvenue, *The Narrative Style of the Priestly Writer* (Rome: BIP, 1971), 70, indicates that the chiastic structure "leans . . . toward proverb style" and is close to the *lex taliones* of Lev 24:19-20.

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life.<sup>50</sup> With this view, the chiasm lends itself to emphasize "the strict correspondence of punishment to offense."<sup>51</sup> (Cf. Lev 24:16-22). Therefore, one can say that here God is placing a barrier against the supremacy of evil. In doing so, He has established "the foundation for an orderly civil development of humanity."<sup>52</sup>

The reason for the strict injunction is now given in 6b: "Because in the image of God, He made man" (cf. 1:27). This is the ground upon which punishment of murder is based, as introduced by  $k\hat{i}$  ("because").<sup>53</sup>

The expression "image of God" has been treated to various interpretations.<sup>54</sup> It is peculiar to Gen 1:26, 27 and 9:6. The rarity of *selem* ("image," which is used only seventeen times in the OT), and the uncertainty of its etymology, makes the interpretation of this phrase very difficult. It may be that *selem* comes from a root meaning "to cut" or "to hew," as attested in Arabic. This would fit the idea of physical image, especially in realizing that the most frequent meaning of *selem* refers to physical image (1 Sam 6:5; Num 33:52; Ezek 16:17. Cf. Gen 5:3, where Seth is after Adam's image). In any event, mankind is made "in our image" (1:26), that is, "the image of God" (1:27; 9:6). This establishes a direct link with the Creation motif. John H. Sailhamer underscores this fact when he comments, "It is significant that just as in Genesis 1, the focus of the author's interest in human beings after the Flood is their creation in God's image (9:6)."<sup>55</sup> Hence, this writer sees this expression as connoting the uniqueness of human beings (in contradistinction to animals) in that we are God's counterparts. As Westermann indicates, "The relationship to God is not something

<sup>53</sup>See further V. Woller, "Zur Ubersetzung von in Gen. 8:21 and 9:6," ZAW 94 (1982): 637-638.

<sup>&</sup>lt;sup>50</sup>Hermann J. Austel, "shopkah," TWOT, 2: 950.

<sup>&</sup>lt;sup>51</sup>Wenham, Genesis, 193.

<sup>&</sup>lt;sup>52</sup>Francis D. Nichol, ed. *The Seventh-day Adventist Bible Commentary* (Washington, D. C.: Review & Herald, 1976), 1: 264.

<sup>&</sup>lt;sup>54</sup>B. Jacob, *The First Book of the Bible, Genesis*, trans. Ernest I. Jacob (New York: Ktav, 1974), 59, says that this points to spiritual qualities. W. Eichrodt, *Theology of the OT*, trans. J. A. Baker (Philadelphia: Westminster, 1967), 2:118ff; L. Kohler, "Die Grundstelle der Imago-Die-Lehre, Gen. 1:26," *ThZ* 4 (1948): 16-22, claim that it refers to likeness in the external form. K. Barth, *Church Dogmatics* III/1: *The Doctrine of Creation*, ed. G. W. Bromiley & T. F. Torrance; trans. J. W. Edwards, O. Bussey, Harold Knight (Edinburgh: Clark, 1958), 182ff, maintains that it points to the person as God's counterpart. E. Jacob, "Le theme de 1 ' Imago Dei dans 1"AT," *Congress of the Orientalists Bol. II* (1957): 583-585, says that this is a reference to the person as God's representative on earth. Irenaeus believed that a distinction must be made between *imago* and *similitudo*. He contends that "image" here refers to natural qualities in a person (reason, personality, and so forth) that make him resemble God. See Alexander Roberts and J. Donaldson, ed, *The Ante-Nicene Fathers*, (Grand Rapids: Eerdmans, 1950), 2:573ff. For further information, see Westermann, "Excursus: The History of the Exegesis of Gen. 1:26-27," *Genesis*, 147-155.

<sup>&</sup>lt;sup>55</sup>See his *The Pentateuch as Narrative: A Biblical-Theological Commentary*, Library of Biblical Interpretation (Grand Rapids: Zondervan, 1992), 128.

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which is added to human existence; humans are created in such a way that their very existence is intended to be their relationship to God."<sup>56</sup>

In any event, the effect and purpose are clearly highlighted: murder is a direct revolt and assault against God. The murderer despoils God. He disrespects God's sovereign right and rule over life. He violates the "image of God" in the person. Hence, the death penalty is invoked for anyone who thus desecrates life: he must pay with his life for taking another's. The central subject is clearly the absolute inviolability of human life. Behind it is the command, "Thou shall not kill."<sup>57</sup> God was protecting humanity's rights by attaching a penalty to willful murder. If one murderer were permitted to go free and subvert others by his evil experience and cruel violence, this would result in conditions similar to the pre-Flood era. This was a measure to sacredly guard human life.<sup>58</sup>

The prohibition of taking human life (vs. 5-6) is stated with certainty in the Pentateuch (Exod 20:12; 21:12; Lev 24:16-22; Num 35:30-34). The express fact is that the one who kills was himself to be killed: "he shall be put to death" (Lev 24:21). Further, the shedding of blood concerned all Israel because it polluted the land.<sup>59</sup> As such, Israel was admonished neither to allow compensation for murder nor to let an accidental murderer leave a City of Refuge:

You shall take no ransom for the life of a murderer who deserves to die. He shall be executed . . . You shall not pollute the land that you are in, for the blood will pollute the land, and the land may not be redeemed for blood spilled in it except by the blood of the spiller (Lev 35:31-34)

Therefore, in the context of Gen 9, v. 7 is more than a restatement of v. 1. It emphasizes the divine purpose for mankind to multiply and fill the earth. Violence and murder are diametrically opposed to God's plan of growth and filling the earth. Verse 7 emphasizes this opposition and adds the crucial word *srt*, which directs the attention to the divine mandate to spread throughout the earth.

<sup>&</sup>lt;sup>56</sup>Westermann, *Genesis*, 158. See further, James Barr, "The Image of God in the Book of Genesis: A Study of Terminology," *BJRL* 51 (1968-69): 11-26; D. J. A. Clines, "The Image of God in Man," *TB* 19 (1968): 53-103; idem, "The Etymology of Hebrew *selem*," *JNSL* 3 (1974): 19-25.

<sup>&</sup>lt;sup>57</sup>Jewish rabbinical tradition emphasizes the prohibition against murder. According to *Sanhedrin*, 380, 390-391, punishment for this must be decapitation or strangulation, and it can be done on the ruling of one judge, the testimony of one witness, on the evidence of a man, but not a woman, even if the witness is a relative. This execution could be done even for the "murder of an embryo." For further commentary on vs. 5ff, see *Shab.*, 152.

<sup>&</sup>lt;sup>58</sup>Nichol, 1:1091; E. G. White, *Patriarchs and Prophets* (Omaha, NE: Pacific Press, 1958), 516.

<sup>&</sup>lt;sup>59</sup>See Tikva Frymer-Kensky, "The Atrahasis Epic and Its Significance for our Understanding of Gen. 1-9," *BA* 40 (1977): 147-155. The author postulates that the Flood was not merely for the means of punishment, but was also for cleansing the land of the pollution caused by the extensive corruption and violence of the people. The flood was the "means of getting rid of a thoroughly polluted world and starting again with a clean, well-washed one" (153).

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### **Relevance and Conclusion**

As has been shown, the passage clearly indicates its theological significance and link with Creation. This link has been observed both on the linguistic and on conceptual levels. God's pronounced blessing on the survivors definitely reflects the Creation event, in that a new starting point of human history is recorded.

First, the blessing to repopulate and rejuvenate the earth, as in Creation, is restated. The blessing's fulfillment is plainly seen in the multiplication of people on the earth. By the same token, later generations right up to the present time are to enjoy that blessing and affirm the responsibility attached to it. Procreation is not merely the result of a sexual encounter, but encompasses a divine sanctification. As such, it must be regarded with utmost sacredness.

Second, human dominion over the animal kingdom, as specified at the Creation, is reaffirmed. However, the difference must be noted: now fear and dread are involved. The same applies at present. Yet, as in Creation, humanity is expected to act responsibly to the animal world and not engage in the useless slaughter of animals.

Third, the food law restates the emphasis on purity in that, in addition to plant or vegetable foods, mankind is allowed to eat only clean meats, and that without the blood. The eating of plant food harks back to Creation, and the allowance of animal flesh was only intended to be supplementary.

Finally, in connection with the above, the sanctity of human life is affirmed. Because mankind was created in God's image, any deadly assault on a person is an attack against God. The gravity of this fact has led some today to proclaim the death penalty for heinous murder. In any event, the central factor is the absolute inviolability of human life, because people are made in God's image.

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# Three Notes on Relations Between Early Rabbinic and Early Christian Sources

William H. Shea

In his *Midrash Reader* Jacob Neusner has provided a convenient collection and arrangement of some of the more significant Rabbinic materials written between 200 and 600 A.D.<sup>1</sup> He has also stratified these sources chronologically by dating the Mishnah to ca. 200, the Tosefta to ca. 300, the Talmud from Israel to 400, and the Babylonian Talmud to ca. 600 (10). Of the three sources utilized below, two come from the earliest of these four strata and the third comes from the third stratum. Neusner discusses briefly the relation between Jewish and Christian sources of revelation and teaching (2-3), and it is only natural that these two sources occasionally touch upon the same or related topics. Three of these overlapping areas have been selected for a brief discussion here.

### I. Mekhilta attributed to R. Ishmael 53, Bahodesh 7, and I Cor 16:2

I Corinthians 16:2 gives the instruction of Paul to the Corinthian church in regard to the offering to be saved up for him to take to Jerusalem, "On the first day of every week each of you is to put something aside and store it up, as he may prosper, so that contributions need not be made when I come" (RSV). This text has been used in some circles to indicate that the first day of the week or Sunday was observed by Corinthian Christians as a holy day. On the contrary, the text actually says the opposite. The offering was to be saved up at home and not brought to a common church meeting.

A similar idea, that of saving something up for Sabbath, is expressed in the Mekhilta attributed to R. Ishmael 53. It is quoted here according to Neusner's translation and arrangement (63):

7. A. Eleazar b. Hananiah b. Hezekiah b. Garon says, 'Remember the Sabbath Day to keep it holy.'

<sup>&</sup>lt;sup>1</sup> Minneapolis: Fortress, 1990

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B. 'You should remember it from Sunday, so that if something nice comes to hand, you should set it aside for the sake of the Sabbath."

The idea of saving something up or laying it aside for the Sabbath here in this Rabbinic source begins on Sunday, the first day of the week, the first day after the Sabbath. Paul urges a similar type of activity on or from the first day of the week. His purpose for this practice was extended, however, not only to the next Sabbath, but starting over again then after that Sabbath to make up the collection for the saints in Jerusalem that he was to collect in Corinth. In spite of this more extended goal, there still appears to be a similarity of practice involved here.

Rabbis early in this era attempted to collect and systematically arrange materials developed from Scripture. The earliest sources setting forth these presentations is the work cited above. Neusner calls it "the first scriptural encyclopedia of Judaism" (49). The rabbis mentioned by name in this document belong to the period of the Mishnah, thus this source is dated to the earliest period of the four mentioned above, ca. 200. That makes the statement of this idea here less than a century and a half later than Paul's expression of a similar idea.

# II. Mekhilta attributed to R. Ishmael 53, Bahodesh 7, and numbering the days of the week according to the Sabbath

The resurrection narratives of the gospels refer to the Sunday upon which Christ rose from the dead as the first day of the week or *sabbaton*. In this case the word Sabbath in the genitive plural stands for the word "week." This practice of numbering the days of the week according to the Sabbath continued among the early church fathers, as is illustrated by the Didache and other early Christian sources (TDNT 7:32).

A prominent Christian radio broadcaster has advocated on the basis of this use that the Resurrection Sunday should be identified as the "first of the (new) Sabbaths" in Matt 28:1. Thus, in his view, Sunday was the first of the new Sabbaths, and Sunday thereby took the place of the seventh day Sabbath.

That this is an incorrect interpretation of the grammar involved is already evident from the early Christian sources referred to above. In addition, it is interesting to see that the rabbis of the period ca. 200 continued to advocate the numbering of the days according to the Sabbath. The source for this is the same Mekhilta cited above, in the passage which follows immediately after the passage in the preceding quotation (Ibid.):

7. C. R. Isaac says, 'You should not count the days of the week the way others do, but rather, you should count for the sake of the Sabbath [the first day, the second day, upward to the seventh day which is the Sabbath]'."

This is parallel to the practice cited above from the New Testament, and it is of interest to see that it was still advocated in Rabbinic sources a century and a

half after its use in the New Testament. Contemporary Christian sources from the second and third centuries indicate that the practice continued there also.

#### III. The Genesis Rabbah and Daniel 7

The writers of the period of the Mishnah do not appear to have had much interest in prophecy *per se*. On the other hand, they did have an interest in history in Scripture as a type or prophecy of the history of Israel. Thus they found the later history of Israel embedded in the stories of Noah, Abraham, Isaac and Jacob in the book of Genesis. The stories about these patriarchs provided pre-figurations of what was to happen to later Israel. This type of interpretation does not appear in the earlier interpretations of the Mishnah. It arose especially in the fourth century to meet the crisis posed by the legalization of Christianity by Constantine. This is the period from which the Genesis Rabbah comes, and it adopted the methodology of seeing past history as future events to meet the crisis of the day. In this way the sages developed the four kingdoms of Daniel 7 from Gen 15 in Genesis Rabbah 44 (Ibid., 88-89)

4. A. ['And it came to pass, as the sun was going down] lo, a deep sleep fell upon Abram, and lo, a dread and great darkness fell upon him' (Gen 15:12):

B. '... lo, a dread' refers to Babylonia, as it is written, 'Then was Nebuchadnezzar filled with fury' (Gen 3:19).

C. 'and darkness' refers to Media, which darkened the eyes of Israel by make it necessary for the Israelites to fast and conduct public mourning.

D. great. . .' refers to Greece.

E. R. Simon said, 'the kingdom of Greece set up one hundred and twenty commanders, one hundred and twenty hyparchs, and one hundred and twenty generals.'

F. Rabbis said, 'it was sixty of each, as it is written, "Serpents, fiery serpents, and scorpions" (Gen 8:15). Just as the scorpion produces sixty eggs at a time, so the kingdom of Greece set up sixty at a time.'

G. '. fell upon him. . .' refers to Edom, as it is written, 'The earth quakes at the noise of their fall' (Jer 49:21).

H. Some reverse matters:

I. ', . fell upon him. . .' refers to Babylonia, since it is written, "Fallen, fallen is Babylonia" (Isa 21:9).

J. '. . great. . . 'refers to Media, in line with this verse, 'King Ahasuerus did make great' (Esther 3:1).

K. 'and darkness' refers to Greece, which darkened the eyes of Israel by its harsh decrees.

L. '...lo, a dread. ... 'refers to Edom, as it is written, "After this I saw ... a fourth beast, dreadful and terrible" (Dan 7:7).

It has long been known that the Rabbis used Edom as a code name by which to refer to Rome, the fourth beast and the fourth kingdom referred to above. What Neusner has supplied here is an interesting rationale for this use. He locates this development in the fourth century, when the legalization of

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Christianity posed an additional problem for the rabbis. Previously Christianity had only been a theological problem, but now it became a political problem:

True, their reading makes no explicit reference to what, if anything had changed in the age of Constantine, but we do find repreated references to the four kingdoms, Babylonia, Media, Greece, Rome—and beyond the fourth will come Israel, the fifth and last. So the sages' message, in their theology of history, was that the present anguish prefigured the coming vindication of God's people. (75)

Putting the crisis of this time in more specific terms, Neusner observes,

To define the terms of the crisis that defined the task of Midrash as prophecy is simple. Christians saw Israel as God's people rejected by God for rejecting the Christ. Israel saw Christians, now embodied in Rome, as Ishmael, Esau, Edom: the brother and the enemy. The political revolution marked by Constantine's conversion not only forced the two parties to discuss a single agendum and defined the terms in which each would take up that agendum. It also made each party investigate the entire past in making sense of the unprecedented and uncertain present. When emperors convert and governments shift allegiance, the world shakes underfoot. (72)

In terms of the specific passage in Genesis Rabbah quoted above, Neusner notes the interpretation that,

The fourth kingdom is part of that plan, which we can discover by carefully studying Abraham's life and God's word to him. What of Rome in particular? Edom, Ishmael, and Esau all stand for Rome, perceived as a special problem, an enemy who is also a brother. In calling now Christian Rome brother, sages conceded the Christian claim to share in the patrimony of Israel. For example, Ishmael, standing for Christian Rome, claims God's blessing, but Isaac gets it, as Jacob will take it from Esau. (89)

Neusner dates the closure of Genesis Rabbath to "some time after 400" (74). From the same period and place the main witness we have to the four kingdom sequence of Daniel as Babylon, Medo-Persia, Greece, and Rome in Christian sources is Jerome. He wrote his commentary on Daniel in the fifth century while living in Bethlehem, making his Vulgate translation. While he utilized the same historical sequence the rabbis used, his personal concern carried that interpretation one step further. As he looked out upon the Barbarian invasions that were leading to the breakup of Rome, he observed that the prophecy of Dan 2 was marching forward from the legs of iron to the feet of iron mixed with clay.<sup>2</sup>

While both Jerome and the rabbis used the same historical sequence, their concerns lay in different areas. The concern of the rabbis was the Christianiza-

<sup>&</sup>lt;sup>2</sup> Jerome's Commentary on Daniel, tr. G. L. Archer [Grand Rapids: Baker, 1958], 32

tion of the empire, while that of Jerome was the de-Christianization of the empire.

#### Conclusion

From time to time early Rabbinic and early Christian sources touch upon the same or similar subjects. Selections from Jacob Neusner's *Midrash Reader* have provided three examples of this:

1. The idea of laying by in store for Sabbath or for a coming event as measured from Sunday onwards is common to Paul and a Rabbinic source from ca. 200.

2. The same Rabbinic source identifies the practice of numbering the days of the week according to the Sabbath in a way that parallels the practice of the New Testament.

3. A later source, from ca. 400, identifies the four kingdom sequence of Daniel as Babylon, Media, Greece, and Edom. In this sequence the name of Edom stands for Rome. Edom was chosen for this identification in part because of the problem for Judaism created by the conversion of Constantiune and the legalization of Christianity. Like Jacob and Esau, who founded Edom, one who had once been a brother was now an enemy. The Christian father Jerome used the same four kingdom sequence, but went on to note the breakup of the fourth kingdom with the Barbarian invasions.

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# Who Succeeded Xerxes on the Throne of Persia?

William H. Shea

A standard interpretation of ancient Persian history in the mid-5th century B.C. is that Artaxerxes I followed his father on the throne after Xerxes was murdered. This interpretation has been developed from the classical writers, the king lists, and the datelines on contract tables from Babylonia which follow this order. Since there is a late Hellenistic astronomical text which dates the murder of Xerxes in the fifth Persian-Babylonian month, or August, the transition between these two kings has been dated in the summer of 465 B.C., about forty days before the Jewish New Year of 1 Tishri. If the Jews, like Ezra, used a fall-to-fall calendar and accession year reckoning, those forty days would have served as Artaxerxes' accession period or Year 0, and his first full year of reign would have begun on 1 Tishri in 465 B.C. That would also make his seventh year extend from the fall of 459 to the fall of 458, not from the fall of 458 to the fall of 457, as Adventist interpreters have held.

But this problem is complicated by two factors. First, there was the political turmoil after the murder of Xerxes. Second, there is the lack of any sources dated to Artaxerxes in the last half of 465 B.C.

The Artaxerxes sources can be reviewed as follows:

1. Persian sources. The earliest tablets from Persepolis date to the third and fourth month of Artaxerxes' first year, or June and July of 464 B.C.<sup>1</sup>

2. Babylonian sources. The earliest texts dated to Artaxerxes in Babylonia came from Nippur and Borsippa and they both date to the seventh month of his first year, or October of 464  $B.C.^2$ 

3. Egyptian sources. The problem is even more difficult in Egypt, where an Aramaic papyrus written on Jan. 2, 464 B.C. is double dated to the accession

<sup>&</sup>lt;sup>1</sup> Parker and Dubberstern, *Babylonian Chronology 626 B.C.-A.D.* 75 (Providence: Brown U, 1956), 17.

<sup>&</sup>lt;sup>2</sup> Ibid., 18.

year of Artaxerxes and year 21 of Xerxes.<sup>3</sup> In this case the regnal year of Xerxes was artifically prolonged after his death in August because of irregularities in the succession. Since Horn has documented that the Jews at Elephantine were using a fall-to-fall calendar, it is of interest that the date in Artaxerxes' reign is his accession year, not his first year, as would have been the case if he came to the throne before 1 Tishri.

This unusual dating is confirmed by Manetho, the Egyptian chronographer of the second century B.C., who places a seven month reign for Artabanus in between Xerxes and Artaxerxes.<sup>4</sup>

4. Summary of the chronological sources. From this survey of Egyptian, Persian, and Babylonian sources, it is evident that there are no dated texts to the accession of Artaxerxes from the last half of 465 B.C., after the murder of Xerxes. The earliest dated texts from these three areas come from Egypt, where his accession year is mentioned in January of 464 B.C. This first regnal year is then mentioned in Persia in the summer of 464, and his first year is also mentioned in the fall of 464 in Babylonia.

There are two possible explanation for this phenomenon. First it may simply be an accident of preservation (or non-preservation). After Xerxes' suppression of the revolt in Babylon, texts from that region become less frequent.

On the other hand, this absence may have stemmed from the course of political events in the Persian Empire after the murder of Xerxes. Those events require a more detailed explanation.

# Ancient Sources for the Events of Late 465 B.C.

Our main source for the events in this period is Ctesius. He was a Greek physician who served at the court of Artaxerxes II, the grandson of Artaxerxes I. He lived in Persia, spoke the language, and had access to official records of the palace. His account is as follows.<sup>5</sup>

With the aid of a palace chamberlain Artabanus, a powerful courtier, murdered Xerxes. Xerxes had an older son and heir named Darius. Artabanus accused Darius of his father's murder to Artaxerxes, the younger son, and with his support he executed Darius. He intended to do the same thing to Artaxerxes, but Artaxerxes beat him to the punch. Informed by Megabyzus of Artabanus' plot, Artaxerxes put Artabanus to death, along with three of his sons, who were killed in a battle after their father was executed. The province of Bactria then revolted against Artaxerxes, but after two victories in battle the king put down that revolt.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> S. H. Horn and L. H. Wood, *The Chronology of Ezra 7* (Washington, D.C.: Review and Herald), 135–138).

<sup>&</sup>lt;sup>4</sup> Neuffer, 68.

<sup>&</sup>lt;sup>5</sup> Reviewed by Neuffer, 64–65).

<sup>&</sup>lt;sup>6</sup> Ctesius, *Persica* (summary by Photius, Brussels, 1947), 33–35.

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Diodorus of Sicily (1st century B.C.) tells much the same story: Xerxes was murdered by Artabanus, who then blamed the murder on Darius, and he offered the help of the king's bodyguard to Artaxerxes to punish his brother. After disposing of the older brother, Artabanus set his sights on the younger brother when "he saw his plan was prospering." Artaxerxes, however, dealt him a fatal blow and "took over the kingship." Diodorus dates these events according to the Roman system, in the last half of 464 B.C.<sup>7</sup>

The third classical historian who refers to these events is Trogus Pompeius (1st century B.C. to 1st century A.D.). He says that Artaxerxes, learning of the treachery of Artabanus, ordered the troops out for review. The young king asked Artabanus to exchange garments with him on that occasion, and when he did so and was unarmed, Artaxerxes stabbed him to death.<sup>8</sup>

To a considerable extent, Diodorus and Trogus Pompeius owe their accounts to Ctesias or similar sources, but they also add their own details.

#### Persian Royal Propaganda

It should be noted carefully that Ctesius was not an eye-witness to these events, but heard them as reported to him two generations later, filtered through the family of Artaxerxes. They were not impartial observers, and they wanted to make Artaxerxes look as good as possible and Artabanus and Darius look as bad as possible. This was a standard technique exercised by many ancient kings, including Persians. Note, for example, Darius I's justification on the Behistun Inscription for taking over the kingship of Persia after the death of Cambyses, and Cyrus' justification for the conquest of Babylon on his Clay Barrel inscription.<sup>9</sup> Thus, while there is undoubtedly a kernel of historical truth in what each of these three writers reports, their records have been filtered through a view favorable to Artaxerxes. We need to get down to a deeper level of the account in an attempt to detect what really happened.

#### Major Discrepancies

The three sources agree that Artabanus murdered Xerxes. That set in motion the events described above. The question then is who took the throne after the death of Xerxes? The answer is obvious: it was the older son Darius who was crown prince and heir to the throne. Artaxerxes was the younger son and not in line for the throne. Ctesius' sources wished to minimize this point, but in actu-

<sup>&</sup>lt;sup>7</sup> Diodorus Siculus, xi.69.1–6, xi.71.1 (Leob Classical Library), IV, 304–307, 308–309.

<sup>&</sup>lt;sup>8</sup> Transmitted by Justinus Frontinus, *History of the World Extracted From Trogus Pompeius*, xiii.1 in John Selby Watson, trans., Justin Cornelius Nepos, and Entropius (London, 1876), 37–38. I owe this and the previous two references to Neuffer, 64–66.

<sup>&</sup>lt;sup>9</sup> This penchant for propaganda among the early Persian kings has recently been reviewed well by S. Douglas Waterhouse in his excellent article, "Why Was Darius the Mede Expunged From History?" in *To Understand the Scriptures*, ed. D. Merling (Berrien Springs, MI: Horn Archaeological Museum of Andrews U, 1997), 173–190).

ality that is the course that events naturally would have taken and undoubtedly did take. Ctesias' sources did not want to admit that Darius became king before Artaxerxes, because that would have reflected badly upon Artaxerxes.

What happened next was that Artabanus went to the younger son to accuse the older son of the murder of his father which he, Artabanus, had actually carried out. The position of the two sons should be noted carefully. Darius was the older son who had taken the throne. Artaxerxes was the younger son whose status as a prince had not yet changed.

This was not a case of accusing one brother to another brother. This was a case of accusing the present king to his younger brother who was still a prince. What was really going on here was a plot to assassinate the then-ruling king. The plot was hatched by Artabanus and readily entered into by Artaxerxes, for then he could see how he could take the kingship away from his brother. This was not a legitimate exercise of the kingship by Artaxerxes, but a plot into which he entered willingly as a means of taking the kingship away from his brother. Darius, not Artaxerxes, was the legitimate king who came to the throne after Xerxes.

From Artabanus' viewpoint, the plot backfired. He had killed Xerxes. He had killed Darius. He planned to kill Artaxerxes. Artaxerxes could see the direction these events were moving. He was the only remaining obstacle to Artabanus placing himself on the throne, which clearly was Artabanus' intent. In this battle of kill or be killed, Artaxerxes won out.

#### A New King Darius

Previously the following kings by the name of Darius are known to have occupied the throne of the Persian Empire:

(1) Darius I Hystaspes (522-486 B.C.),

(2) Darius II Nothus (423-404 B.C.), and

(3) Darius III Codomanus (336-330 B.C.).

Not including the Darius the Mede of the book of Daniel, we now need to add a fourth to the line of Persian rulers: Darius the son of Xerxes. Since both Darius II and III ruled after him, their designations need to be extended to Darius III and IV.

How long did this older son of Xerxes rule after his father's death in August of 464 B.C.? Two or three months would be a useful estimate. He certainly ruled less than five months, since Artaxerxes was recognized as king in Egypt by January of 464 B.C. Since he did not live until the spring New Year in 464 B.C., he would only have had an accession year by Persian-Babylonian reckoning, and he did not live to begin his first full regnal year.

It may be objected here that we have no direct inscriptional evidence for his reign. It is based only on an inference from information from Ctesius, Diodorus, and Trogus Pompeius. But the same is also true of any accession period of Artaxerxes I, late in 465 B.C. The inference from the classical writers is also more

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direct for Darius than it is for Artaxerxes, since those authors recognize Darius as the older son of Xerxes and heir to the throne. Since he lived after the death of Xerxes until he was slain by Artabanus, he, and not Artaxerxes, should have been king for at least some portion of the latter half of 465 B.C.

#### **Potential Contract Tablet Evidences**

An objection noted above is that there is not, to the present, contemporary inscriptional evidence for Darius the son of Xerxes as king. There may have been some, but it may have been covered up by Artabanus or Artaxerxes, or both. Since he may have ruled for only a brief time, it may not have been difficult to have covered those tracks. On the other hand, evidence for his brief reign may exist among the contract tablets of Babylonia. They could be sorted out in the following way. These ordinary business documents make no distinction between which Darius they were inscribed under: Darius I, II, or III; Darius Hystaspes, Nothus, or Codomanus. These additional designations were not used in the datelines on these tablets. They only gave the day, month, and regnal year with the name Darius and the royal title, "King of Lands."

Tablets from the reign of Darius III, the king conquered by Alexander, are virtually non-existent. It is up to the historian, therefore, to sort out the tablets dated to a Darius "King of Lands" to see whether they belong to Darius I, Darius II, or now, Darius the son of Xerxes. One need only check the tablets from the accession year to look for this additional Darius, since he was assassinated before his first regnal year. Various collections of these tablets and their catalogues have been published. I have listed a number of them in two early studies.<sup>10</sup>

Once the appropriately dated tablets are located, they need to be assigned to the appropriate Darius by a study of the personal names in texts. Since the accession years of these three rulers named Darius were, respectively, 522, 465, and 423 B.C., there should be no significant overlap between their personnel, and they can be related to persons in other texts from those times.

It may be that even following this procedure no texts dated to Darius the son of Xerxes would be found because this course of events may have only been known in Persia, and word of it may not have reached Babylonia. On the other hand, the evidence may be there and not have been recognized previously for what it is. Outside of the Persepolis Fortification Tablets, texts from ancient Persia are not as common as they are from Babylonia.

#### Summary

The preferable way to read Ctesius, Diodorus, and Trogus Pompeius is to take Darius, the older son and heir to the throne of Xerxes, as having actually

<sup>&</sup>lt;sup>10</sup> "An Unrecognized Vassal King of Babylon in the Early Achaemenid Period," pts. I and II, *AUSS* 9 (1971): 51–67, 100–128.

ascended to the position of king after the death of his father. His brief reign was cut short, however, in a plot launched against him by Artabanus and his younger brother Artaxerxes. In the struggle for power after Darius' death, Artaxerxes won out and Artabanus was vanquished. Artaxerxes, a young king, went on to reign for the next forty years, down to 423 B.C.

How long did Darius reign between Xerxes and Artaxerxes? Undoubtedly, not very long, but if his brief reign took up only as little as six weeks in August or September, that would have put the accession of Artaxerxes after 1 Tishri according to the Jewish fall-to-fall calendar. According to this kind of reckoning, that means that his first full regnal year would have extended from the fall of 464 to the fall of 463, and his seventh year from the fall of 458 to the fall of 457. Whatever the precise course of events that occurred during this troubled time, it is reasonable to estimate the chronological course described here. The lack of documentation during the latter months of 465 B.C. may not be just an accident of (non-)discovery, but could have occurred because of a royal cover-up by Artaxerxes. That was the point of view from which Ctesius and the other classical writers received their stories.

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# Supplementary Evidence in Support of 457 B.C. as the Starting Date for the 2300 Day-Years of Daniel 8:14

William H. Shea

Seventh-day Adventists have long held that the 2300 prophetic and symbolic evening-mornings or historical years extend from 457 B.C. to A.D. 1844.<sup>1</sup> This has been done on the basis of the apocalyptic rule of a symbolic and prophetic day equaling a historical year (Eze 4:6; Num 14:34).<sup>2</sup> The starting point has been established by "cutting off" the 70 weeks or 490 years of Dan 9:24–27 from the first portion of the 2300 days.<sup>3</sup>

The time period of Dan 9 begins with the going forth of the "word" to restore and rebuild Jerusalem (v. 25). Four different decrees have been reviewed to establish this starting point: Cyrus' decree in Ezra 1, Darius' decree in Ezra 6, the decree of Artaxerxes I in Ezra 7, and the letter of the same king to Nehemiah in Neh 2. The first two decrees deal with the rebuilding of the temple, and the last two have to do with the reconstruction of the city. It is, therefore, from the first of the last two decrees that the date for the prophecy of Dan 9:25 should be dated. This decree is dated to the 7th year of Artaxerxes (Ezra 7:7), according to the Jewish fall-to-fall reckoning employed by Nehemiah (Neh 1:1; 2:1), Ezra's contemporary and fellow worker (Neh 8:1, 9). This extended from Tishri or September–October in 458 B.C. Since the events described for this year fell in the winter, spring, and summer of 457 B.C., Seventh-day Adventists have used that year as the basis for their calculations. These are correct but, according to the additional details examined below, more evidence can be adduced in support of their accuracy.

<sup>&</sup>lt;sup>1</sup> G. F. Hasel, "Divine Judgment," in *Handbook of Seventh-day Adventist Theology*, ed. R. Dederen, et. al (Hagerstown, MD: Review and Herald, 2000), 838–839.

<sup>&</sup>lt;sup>2</sup> See "Year-Day Principle" in my *Selected Studies on Prophetic Interpretation*, Daniel & Revelation Committee Series, Vol. 1 (Silver Spring, MD: Biblical Research Institute, 1992), 67–110.

<sup>&</sup>lt;sup>3</sup> See my Daniel 7-12 (Boise: Pacific Press, 1996) 107-109.

# The Death of Xerxes, the Accession of Artaxerxes, and the Latter King's 7th Year

According to a late and still unpublished astronomical text, Xerxes was murdered in August of a year in which two eclipses of the moon occurred. This unusual circumstance dates that year firmly to 465 B.C. The succession of Artaxerxes was delayed because of palace intrigue, especially by a leading official who wanted to make himself king.<sup>4</sup> This delayed his accession until after 1 Tishri of that year. This means the balance of that year and 464 until the fall New Year of 1 Tishri constituted his accession year, according to the Jewish fall-to-fall calendar. Thus, his first year began in the fall of 464 B.C. That dates his seventh year from the fall of 458 B.C. to the fall of 457 B.C.

#### The Date of Ezra's Arrival in Jerusalem

The decree that was given by Artaxerxes to Ezra is recorded in Ezra 7:11–26. The month in which it was given is not recorded, but it was given in time for Ezra and those with him to depart on the first day of the first month of Nisan (Ezra 7:7–8). They left central Babylonia at that time, and on the 9th day of that same month they encamped at the Aha'va River (Ezra 8:15, 21, 31). After camping there for three days, during which a fast was proclaimed, they pressed on to the province of Judah. They arrived there on the first day of the fifth month (Ezra 7:8). They spent three days in Jerusalem and then unloaded the vessels for the temple (Ezra 8:31–34).

The decree which led to this return undoubtedly was given during the winter, probably January or February, in order for them to be ready for a departure in March–April or Nisan, the first month. This locates these three events on the following time scale: The decree of Ezra 7:11–26 in the winter of 458/457 B.C., the departure in the spring of 457 B.C., and the arrival in the summer of 457 B.C. This was then followed by the fall New Year of 1 Tishri in September–October of 457 B.C. This completed the Jewish fall-to-fall calendar year from 1 Tishri in September of 458 B.C. to 1 Tishri in September of 457 B.C. This was the 7th year of Artaxerxes according to Jewish reckoning.

#### Ezra's First Action: Dealing With Foreign Wives

According to Ezra 9:1, "after these things"—i.e., after the arrival and deposit of the vessels in the temple—some unidentified officials came to Ezra and reported that "the people of Israel and the priests and Levites ha[d] not separated themselves from the peoples of the land." Far from it—they had intermarried to an alarming extent. When Ezra heard this he went into lament, mourning (Ezra 8:3–5), and prayer (8:6–15).

<sup>&</sup>lt;sup>4</sup> Julia Neuffer, "The Accession of Artaxerxes I," AUSS 6:1 (1968): 60-87.

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To deal with this problem Ezra called for a convocation in Jerusalem (10:6–8). The men of Judah came to that assembly on the twentieth day of the month (10:9), or December of 457 B.C. This was after the fall New Year of 1 Tishri that began the eighth year of Artaxerxes, according to Jewish fall-to-fall reckoning. In the cold rainy winter month of December the people complained about having to stand out in the rain (10:13), and as a consequence a more detailed investigation was set in motion. The inquiry began its work ten days later, on the first day of the tenth month, and they finished their investigation two months after that, on the first day of the first month, in the spring of 456 B.C. The list of those who had married foreign wives and pledged to put them away is then given the last twenty-six verses of the book of Ezra (10:18–44).

From this a calendar can be set up for Ezra's first major action in Judah. He was apprized of the problem of foreign wives in the fall of 457 B.C., and the problem was resolved by the spring of 456 B.C. All of this occurred within the eighth year of Artaxerxes when viewed from the standard of the Jewish fall-to-fall calendar.

#### Ezra's Second Major Action: To Start Building the City of Jerusalem

With the problem of foreign wives and the people's purification out of the way, Ezra could now turn his attention to a major project—the rebuilding of the city of Jerusalem. The temple had been rebuilt by 516 B.C. (Ezra 6:15, the 6th year of Darius I), but the city around and adjacent to it was still in ruins. This was the next project Ezra took on, and the evidence for it comes from the letter of the western governors in Ezra 4:11–16.

At first glance this letter appears to be out of order. It is partially out of order chronologically, but chapter four takes a topical side branch to deal with opposition to the Jews. The order of this chapter is:

Opposition to the Jews in the time of Cyrus—vs. 1–5

Opposition to the Jews in the time of Xerxes-v. 6

Opposition to the Jews in the time of Artaxerxes—vs. 7–23

A return to the rectification of the problem of opposition in the time of Cyrus—v. 24 (in the time of Darius)

Then the rest of the book goes on to tell of the successes of the Jews, first in the time of Zerubbabel in chapters five and six, when they built the temple. Then the rest of the book deals with the return under Ezra and its consequences in chapters 7-10, as described above.

Thus Ezra has first given the negative side of the story in chapter 4 and then the positive side of the story in chapters 5–10.

There is also an internal chronology in chapter four that is successive and consistent. It deals with four Persian kings:

1. Cyrus (539–530 B.C.), vs. 1–4

2. Darius (522-486 B.C.), v. 5

3. Xerxes (486–465 B.C.), v. 6

4. Artaxerxes (465 B.C. ff.), vs. 7–24

5. Return to Darius I, v. 24 and chapters 5–6

Only Cambyses is missing from the list (530–522 B.C.), and he undoubtedly is absent because nothing good happened to the Jews during his reign. He was opposed to foreign gods, and thus no work was done on the temple in Jerusalem during his reign.

With this chronology and internal consistency in the book of Ezra established, the nature of the problem during the reign of Artaxerxes can be addressed more directly. The problem can be specifically located during the reign of Artaxerxes both because of the reference to him in Ezra 4:7 and because of the address on the heading of the letter of the western governors that was sent to him, "to Artaxerxes the king." Thus, it does not really matter where in the book of Ezra this letter is located, for it clearly belongs to Artaxerxes, because it was addressed to him. "[T]his is a copy of the letter that they sent," is the way this letter is introduced.

The problem, in the view of the western governors, is stated succinctly: "Be it known to the king that *the Jews who came up from you* to us have gone to Jerusalem. They are *rebuilding* that rebellious and wicked *city*; they are *finishing the walls* and *repairing the foundations*" (v. 12). Then they threatened the king with the loss of tax revenue if he permitted this city to be built, because it had a reputation for rebellion, and thus withholding tax payments.

The king agreed with the estimate of the western governors and instructed them to "make a decree that these men be made to cease, and that this *city be not rebuilt* until a decree is made by me" (v. 21). The king's response is appropriate to the warning of the western governors. The city was being rebuilt, and he told them to stop it from being rebuilt.

The first question here is, Who was doing this rebuilding of Jerusalem? The people who led and stimulated this rebuilding "came up from you," i.e., Artaxerxes. Thus this was not the group that returned in the time of Cyrus because they did not come from Cyrus; they came up from Artaxerxes. He knew who they were. He permitted them to come back to Judah.

Nor does this fit with Nehemiah, for he was not stopped in his efforts to get the walls of Jerusalem up. Nehemiah's opponents—Sanballat, Tobiah, and Gershem (Neh 6:1), were different from the opponents of the Jews who wrote to the king in this case—Bishlam, Mithredath, Tabeel, Rehun, and Shimshai (Ezra 4:7–9).

Thus, there was an eventual rebuilding of the temple by those who returned under Cyrus. There was also an eventual rebuilding of Jerusalem under Artaxerxes, and an initially unsuccessful attempt at rebuilding Jerusalem earlier in the reign of Artaxerxes. This fits perfectly with Ezra and the group of people who returned with him (Ezra 8).

The question then is, when did Ezra undertake this attempt at rebuilding Jerusalem? He could not have undertaken it before he dealt with the issue of for-

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eign wives, for the people were too divided over that issue. The logical time for him to have done so was after that issue had been cleared up in the early spring of 456 B.C. Thus, the most favorable time to undertake this construction project was in the spring, summer, and fall of 456 B.C.

#### The Requirements of Dan 9:25

Daniel 9:25 dates the beginning of these two prophetic time periods to the "going forth of the 'word' to restore and rebuild Jerusalem." Several different approaches have been taken toward the significance of this phrase. Historicocritical scholars date it to ca. 593, when Jeremiah received the prophetic "word" that Jerusalem would be restored after the 70-year period of exile. This is done in an effort to shorten the prophetic time period down to the time of Antiochus Epiphanes in 165 B.C., but neither the dates nor the events involved work out.

A second approach has been to look for a royal decree from a king to rebuild Jerusalem. For evangelical scholars, this has been taken as Artaxerxes' letters to Nehemiah, as referred to in Neh 2:1–9, the 20th year of Artaxerxes, or 444 B.C. Nehemiah does refer to the broken down state of Jerusalem and ask permission to rebuild it. However, his specific request is only for letters to the western governors to permit him to pass on to Judah and to the keeper of the king's forest for timber to make beams for the gates of the fortress. In contrast with Ezra 1, 6, and 7, where the royal decrees given to the Jews are quoted, the contents of the letters are not quoted here in this context.

Starting from 444 B.C. and adding 490 years to the time of the Messiah takes one more than a decade beyond the time of Jesus of Nazareth. This has required a shortening of the time period involved by using a lunar calendar calculation so complicated that it is unlikely that anyone in ancient (or modern) times could understand it.<sup>5</sup> Thus, this approach has not worked out well.

This has led back to the royal decree of Artaxerxes that was given to Ezra. It is extensive, and it is quoted in the Aramaic in which it was written (Ezra 7:11-26). The problem here is not so much with the date as it is with the con-

<sup>&</sup>lt;sup>5</sup> Futurist scholars begin with the assumption that the final seven year period of the 490 dayyear prophecy is still to come after a Christian "parenthesis." This leaves them with 483 years, rather than 490, to deal with. Knowing that a prophetic year consists of twelve months of thirty days, or 360 days, they multiply 483 by 360, yielding 173,880 days. They then turn this into actual years by dividing this by 365, yielding 476.38 years rather than 483. They claim this reveals, to the day, when Jesus entered Jerusalem hailed as a king. Among the problems is the fact that there is no biblical sanction for turning "prophetic" years into "actual" years. A year was a year. (Note that when they deal with the 1,260 days, 42 months, and "time, times, and half a time" of Revelation, this sleight of hand is not used.) Second, the "anointing" in question in Daniel is not the people hailing Christ as their king, but the descent of the Holy Spirit and the pronouncement of the Father at Jesus' baptism, more than three years before. By cutting off seven years and placing the anointing three years later than it occurred, futurists work their way around the problem of having their calculation end a decade away from the date given by the more straight-forward reading of the text.

tents of the decree. The decree gives Ezra wide ranging authority, allowing him to inflict the death penalty (Ezra 7:26), to teach the Law of God, even to non-Judahites (v. 25), and to appoint legal magistrates in various places (v. 25). In addition, there were extensive offerings given to the temple by the Persian king. Of these offerings the king said, "whatever seems good to you and your brethren to do with the rest of the silver and gold, you may do, according to the will of your God" (7:18). Thus, for Ezra to have used the balance of the silver and the gold for rebuilding Jerusalem would not be unexpected and, given the wide ranging authority granted to him, it is not surprising that he found it within the realm of his authority to start this building project. The evidence from the letter of the western governors in Ezra 4:11–23 indicates that he did.

Thus, there are internal grounds for using the decree of Artaxerxes in Ezra 7 for the starting point of the 70 weeks of Dan 9:24–27. Nevertheless, it is still awkward that the decree does not specifically authorize the rebuilding of the city of Jerusalem. There may be an exceptical way to make the application more specific. It requires an examination of the word used for the order to rebuild in Dan 9:25.

#### The Hebrew Word for "Word" in Dan 9:25

The word used here for the going forth of the "word" to restore and rebuild Jerusalem is the common Hebrew noun *dabar*. It is the common word for "word" that is used 1430 times in the Old Testament. Aside from the common meaning of the word, it can also mean an "affair, thing, something." It is not the specific and technical term for a royal decree. It can commonly be the word from one person to another, and in a number of cases it can be the word of God to a person or persons. In the book of Daniel there are two words that are used for a royal decree. The decree of Nebuchadnezzar is referred to as a *gezerah* (Dan 4:17, 24). For the decree of Darius the Mede the word used is *'esar* (seven times in Dan 6). Both of these words are in Aramaic passages, however, and Dan 9:25 was written in Hebrew.

In the book of Ezra decrees of the kings are mentioned in a number of places, commonly with the Aramaic word  $te^{c}ern$  (4:10, 21; 7:14, 21 = Artaxerxes; 5:13, 21 = Cyrus; 6:8, 11 = Darius). In the Hebrew portions of Ezra the word  $q\hat{o}l$  is used for Cyrus' decree in 1:1, but the same word is used for Ezra's proclamation for the gathering of the people to Jerusalem to deal with the issue of foreign wives (10:7). This is the common word for "voice," which leads to the idea of the order, command, or decree as being the spoken word of a person, royal or common.

In the book of Esther, written in Hebrew, the word *dat* is used nine times for decrees of Ahasuerus or Xerxes (2:8; 3:15; 4:3, 8; 8:14, 17; 9:1, 13, 14). This is a loan word from Old Persian meaning "law." It is also used three times in the Aramaic of Daniel for decrees of Nebuchadnezzar (2:9, 13, 15).

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From this brief lexical search of Ezra, Daniel, and Esther, no specific evidence has been found suggesting that we ought to translate the *dabar* of Dan 9:25 as a "royal decree." It could just as well be the word of a person other than the king. The question, then, is who gave the "word," in order or command, to begin the reconstruction of Jerusalem? It can only be said to be Artaxerxes in an indirect and oblique sense. Who gave the order or command in a more direct and specific sense? The answer from the above examination of the letter of the western governors is obvious. The one who sent out the word to begin the reconstruction of Jerusalem was Ezra. It was not issued by a Persian king from Pasargadae or Persepolis, it was sent forth from Jerusalem by Ezra. Just as his "voice" or word went throughout the land to gather at Jerusalem to deal with the issue of foreign wives, so his word was sent forth after the episode to call the people back to Jerusalem for its reconstruction. Thus the "going forth of the word to restore and rebuild Jerusalem" in Dan 9:25 was Ezra's word, not the decree of Artaxerxes. Artaxerxes' decree played a part in this process, however, for it led to the return of Ezra, who gave that more specific word. Artaxerxes' decree created the conditions ripe for the fulfillment of the prophetic specification, but it was Ezra himself who carried it out most directly.

That raises the question of when Ezra sent forth this word to rebuild Jerusalem. In the chronology developed above, it was noted that this could only have taken place after the issue of foreign wives was dealt with. That process was completed by the first month of Nisan in 456 B.C. The going forth of Ezra's word to rebuild should have taken place soon after that, in the late spring or early summer of 456 B.C. All of this still falls within the Jewish fall-to-fall calendar for the eighth year of Artaxerxes.

#### Chronological Effect of Calculating the 2300 Days of Dan 8:14

As outlined earlier in this study, the decree that Artaxerxes gave to Ezra for his return was undoubtedly given earlier in 457 B.C., in January or February. Then Ezra began his return in March–April, and he arrived in Jerusalem in July–August. Previous interpretations have held that Ezra's arrival fulfilled the conditions of the decree of Artaxerxes, thus the count of 2300 day-years starts in the fall of 457 B.C. as the beginning of the first fall-to-fall year of the 2300. That takes us to the year from the fall of A.D. 1843 to the fall of 1844 as the last of the 2300 years. The historical points at the beginning are correct and the calculations are correct, starting from the fall New Year immediately after the arrival, fulfilling the conditions of the decree.

What is suggested here is that there is another way of arriving at this final end point. If one counts from the fall-to-fall year of 457–456 B.C., Artaxerxes' eighth year, one can count directly from the time when Ezra's word was sent out to rebuild Jerusalem. This is a way, therefore, of counting that same year as the first year of the 2300. The conclusion is the same, that from the fall of A.D. 1843 to the fall of 1844 was the 2300th year of Dan 8:14. One can reach that

conclusion indirectly from Artaxerxes' decree or one can count it directly from the time when Ezra's word went forth for the rebuilding of Jerusalem. Given the fact that Ezra's word fulfills the specification of Dan 9:25 more directly, that appears to be the preferable route to follow.

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# The Search for Darius the Mede (Concluded), or, The Time of the Answer to Daniel's Prayer and the Date of the Death of Darius the Mede

William H. Shea

After a brief flirtation with Cyrus as Darius the Mede in the book of Daniel,<sup>1</sup> I returned to an earlier position<sup>2</sup> identifying him with Ugbaru, the general who conquered Babylon for Cyrus.<sup>3</sup> In my most recent study of this subject, however, a shift was made from a "long" chronology of Darius' reign to a "short" chronology. Instead of assigning him a year and a month of rule after the fall of Babylon,<sup>4</sup> his reign was reduced to approximately one month.<sup>5</sup>

This shift was necessitated by the recent publication of the Sippar tablets, which make it clear that the co-regency between Cambyses and Cyrus occurred during the latter king's first full year of reign in Babylon.<sup>6</sup> Thus, it was necessary to move the reign of Darius the Mede either earlier or later than the first year. Since the events described in Daniel indicate that they took place soon after the fall of Babylon, Darius should fit in the earlier period. This locates his short reign during the "accession year" of Cyrus, from October of 539 to the

 $<sup>^1\,\</sup>rm W.$  H. Shea, "Darius the Mede in His Persian-Babylonian Setting," AUSS 29 (1991): 235-257.

<sup>&</sup>lt;sup>2</sup> Idem., "An Unrecognized Vassal King of Babylon in the Early Achaemenid Period," *AUSS* 9 (1970): 51-67; Id., Ibid., pt. II. *AUSS* 9 (1971): 99-128, Id., Ibid., pt. III, *AUSS* 10 (1972): 88-117; Id., Ibid., pt. IV, *AUSS* 10 (1972): 147-178; Id., "Darius the Mede: An Update," *AUSS* 20 (1982): 237-240.

<sup>&</sup>lt;sup>3</sup> Idem., "Nabonidus Chronicle: New Readings and the Identity of Darius the Mede," *JATS* 7 (1996): 1-20.

<sup>&</sup>lt;sup>4</sup> Idem., "An Unrecognized Vassal," pt. IV, 175-178.

<sup>&</sup>lt;sup>5</sup> Idem., "Nabonidus Chronicle," 5-8.

<sup>&</sup>lt;sup>6</sup> Volumes 55, 56, and 57 of the British Museum publication, *Cuneiform Texts From the Babylonian Tablets in the British Museum (CT)* (London: British Museum, 1959-). See my review of the relevant texts in "Darius the Mede in His Persian-Babylonian Setting," 237, n. 7.

new year in the spring of 538.<sup>7</sup> During this period Cyrus carried only the title "King of Lands" (i.e., of the Persian Empire) in tablets written there, without the local title "King of Babylon."<sup>8</sup> That still leaves room for a short reign of Darius the Mede in this period.

In my most recent study on this subject, I considered the question of just how much time the biblical texts require for Darius' reign. The answer is, not very much. The events of Dan 6 require less than a week, and Daniel's prayer and Gabriel's answer in Dan 9 need only a day. These events took place at some unspecified points in Darius' first year (Dan 9:1), so we do not know how long that first year lasted. Co-regents do not have an "accession year," since their first year begins at the point when the senior king appoints them as co-kings.<sup>9</sup>

In this present study the short reign of Darius is shrunk even further, from about one month to about one week. Also, when that is done a close integration of the biblical and Babylonian events results. When that shortening is accomplished, it provides further explanations of why those events took the course that they did.

# Interpretation

**Darius as Military Governor of Babylon**. The name given to Cyrus' general in the Nabonidus Chronicle varies. In one instance it is spelled as Ugbaru, in another instance it is spelled Gubaru, and in the third occurrence the first sign of the name is defective.<sup>10</sup> Clearly the same individual is referred to in all three cases, and for convenience he is referred to here as Ugbaru.

Ugbaru was the general whose troops conquered Babylon on the  $16^{th}$  of Tishri, according to the Nabonidus Chronicles. This fits perfectly with the reference in Dan 5:31, which states that Darius the Mede "received" the kingdom when Belshazzar was slain, the night the city fell (v. 30). The verb used here (qbl) has been accurately translated as "received," and it does not mean that he became king then. It only implies that he took over rule there on a temporary basis until Cyrus the full king arrived. Darius was, in effect, the trustee of the conquered kingdom until Cyrus came. In this span of two weeks, from 7/16 (i.e.,  $16^{th}$  of Tishri, the seventh month) to 8/3 (i.e.,  $3^{rd}$  of Marchesvan, the eighth month), he could best be described as the military governor.

<sup>&</sup>lt;sup>7</sup> R. A. Parker and W. H. Dubberstein, *Babylonian Chronology 626 B.C.-A.D.* 75 (Providence: Brown U, 1956), 29.

<sup>&</sup>lt;sup>8</sup> See parts I and II of the studies cited in n. 2 above.

 $<sup>^{9}</sup>$  We have the example right from this same period of Cambyses, where only the first year of his coregency shows up in the datelines on the tablets—no accession year texts. See n. 6 for the references. There are also the double dated texts from the  $12^{th}$  dynasty in Egypt, which show the same phenomenon.

<sup>&</sup>lt;sup>10</sup> In line 15 of column III of the Nabonidus Chronicle his name reads Ugbaru in reference to his conquest of Babylon. In line 20 his name is written as Gubaru when he appointed sub-governors. In line 22, which tells of his death, the first sign in his name was written defectively, but like the sign for Ug-. So his name there reads as X-ba-ru or (Ug)-ba-ru. *ANET*, 306.

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This interpretation requires one correction to the previous study. There it was advocated that the verb which referred to Ugbaru's troops guarding the temple area in this period meant that they kept the people out, in compliance with Darius' thirty-day decree concerning no prayers to any god.<sup>11</sup>

I now revert back to the more traditional interpretation that Ugbaru's troops simply maintained the temple area in peace.<sup>12</sup> No disruption in the temple services took place at this time. The transition was an orderly one. Darius' thirty-day decree came later.

The Arrival of Cyrus and the Installation of Darius. The Nabonidus Chronicle dates the arrival of Cyrus in Babylon on 8/3. Crowds of people greeted him, apparently with jubilation. They saw him as a deliverer from the disliked Nabonidus and his son Belshazzar.

It is at this time that Cyrus, as the reigning authority, would have installed Ugbaru as vassal king in Babylon to rule jointly with him. Ugbaru took the throne name of Darius, by which he appears in the book of Daniel. Daniel refers to this event with the verb in Daniel 9:1 stating that Darius "was made king." This is the correct translation of the *hophal* verbal form, and the weaker translation "became king" (RSV, et al.) does not adequately capture the sense intended. He was made king by the agency of someone else, i.e. Cyrus.

Thus the two verbs used for Darius' rule in Babylon are very specific in their nature and refer to different actions at different points in time. Darius "received" the kingdom when he conquered it on 7/16, and he "was made king" there when Cyrus appointed him as vassal king or co-ruler.

In its next statement after the reference to Cyrus' arrival, the Chronicle still refers to Ugbaru as "his governor." Technically speaking, this is correct on two counts. First, he had been Cyrus' (military) governor in Babylon for the two preceding weeks. He may also have been a governor for Cyrus in some other province before this conquest. However, it was only Cyrus' appointment there on 8/3 or 8/4 that made him king.

**Cyrus' Departure and Darius' Appointment of Sub-governors.** The Chronicle does not tell us when Cyrus left Babylon, but it is reasonable to assume that he did so shortly thereafter. In the first place, he was delayed in arriving there for two weeks, undoubtedly due to mopping up remaining pockets of Babylonian resistance. It is likely that he had more of this kind of work to do. His enemy Nabonidus was still on the loose, for the Chronicle indicates that he was only captured there later when he returned to the city. Thus, Cyrus probably set out in further pursuit of Nabonidus on 8/4 or 8/5.

Shortly after Cyrus' departure, Darius took his first action in setting the kingdom in order: he appointed governors. The Chronicle attributes this action to Ugbaru, and Dan 6:1-2 attributes this action to Darius. They should, there-

<sup>&</sup>lt;sup>11</sup> Shea, "Nabonidus Chronicle," 5-8.

<sup>&</sup>lt;sup>12</sup> ANET, 306.

fore, be identified as the same person. Daniel is more specific in terms of identifying the number of lower and upper level officials.

But the highest post under the king had not yet been filled—that of chief governor or first president. The other officials could see, however, the way the selection process was going. Darius had evidently become acquainted with Daniel during the period of his military governorship, and Dan 6:3 says he "planned" to appoint him to that post.

Fearing Daniel's appointment was imminent, the other officials, his rivals, had to swing into action quickly. If they were appointed on 8/6, then they probably hatched the plot against Daniel that night and went to the king with it the next day, 8/7. Darius, not realizing what was coming next, acceded to the decree that no prayers could be given to any god for thirty days. The decree went into effect, let us say, on 8/7.

Daniel heard about the issuing of the decree at that time, but he determined to continue with his usual practice of praying three times a day (Dan 6:10). As has been pointed out in the previous study, it did not take thirty days to catch Daniel in prayer; it only took one day. The next day, 8/8, Daniel's violation was reported to the king, and the king was forced to take action by the strength of his own decree. He had to put Daniel in the lions' den.

As has been noted in the previous study,<sup>13</sup> this was an auspicious time for a decree of this nature to be issued. Nabonidus had gathered most of the gods of the cities of Babylonia into the capital city in order to protect it. They had not yet been returned. That course of action did not begin until the next month, the 9<sup>th</sup>, according to the Chronicle. With most of the gods gathered locally, Darius had more control over access to them for prayers. This kind of control he would not have had available to him later, when the gods were returned to their various cities.

**Daniel In and Out of the Lion's Den.** The officials antagonistic to Daniel did not have long to wait. They reported his actions to the king, probably on 8/8, and Daniel spent that night in the den with the lions, where he was protected by the angel. The king worried about Daniel and spent that sleepless night fasting (Dan 6:18). The next morning, however, Daniel emerged unscathed (vs. 19-23). By now we have reached 8/9 in the rapid procession of events.

Dan 11:1 says Gabriel "confirmed" and "strengthened" Darius the Mede. These are two separate actions. He was "confirmed" when he became king on 8/4. He was "strengthened" especially during his night of anxious waiting while Daniel was down in the lions' den. While one angel protected Daniel, another ministered to the anxious king.

Angered by the officials who had maneuvered him into this awkward position, Darius now took action against them. Probably within an hour or two after having Daniel removed, he cast the officials and their families into the lions'

<sup>&</sup>lt;sup>13</sup> Shea, "Nabonidus Chronicle," 5-8, 11.

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den. On this occasion the lions were not so cordial in their reception as they were to Daniel. Those officials and their families died there in Daniel's place (v. 24).

Recognizing the divine protection afforded to Daniel, Darius made a decree that all of his subjects should "tremble and fear" before the God of Daniel (vs. 25-27). It is interesting to note that the text does not say they should pray to his God on this occasion.

**The Plot.** Darius had now angered two groups of his constituents on three counts. First, he had angered his officials by favoring Daniel over them and then by executing their colleagues who were more intimately involved in the plans against Daniel.

Second, he had angered the priests of Marduk on two counts. First he had prohibited any prayers to the god whom they served, the god of the city and the country of Babylon. Then he had added insult to injury by proclaiming a decree in favor of the God of Daniel, not their own god Marduk.

The priests of Marduk were a powerful class in Babylon. They were sufficiently powerful that Nabonidus went into exile in Teima of Arabia for ten years for favoring the moon god Sin over Marduk.<sup>14</sup> They were not a class to be trifled with, and by favoring the God of Daniel over their god, Darius put himself in the path of danger that Nabonidus had avoided by voluntary exile.

The priests of Marduk, perhaps joined by disaffected officials, hatched a plot against Darius. They determined to poison him. This has been suggested in a previous study,<sup>15</sup> but now the specific occasion is suggested. The plot against Darius had been hatched by 8/10, and they put it into effect on 8/11.

**The Occasion of the Assassination: The Evening Sacrifice.** While the priests of Marduk were plotting against the king, Daniel was praying to his God for the return of his people and the restoration of their land, city, and temple (Dan 9:1-20). The answer to his prayer came, and it was presented to him by Gabriel (vs. 21-23). He told Daniel that the people would go back and restore their city and temple. He also gave a longer view of the future of Daniel's people (vs. 24-27). This answer came when Gabriel appeared to Daniel at the "time of the evening sacrifice" (Dan 9:21).

It is commonly assumed by the commentaries that this refers to the time of sacrifice in Jerusalem,<sup>16</sup> but that does not necessarily follow. The people had not yet returned (Ezra 1-2), the temple had not yet been rebuilt (Ezra 5-6), and the altar there had not yet been reconstructed for sacrifice (Ezra 3). Thus, no sac-

<sup>&</sup>lt;sup>14</sup> For Nabonidus' ten year sojourn in Teima see now Paul-Alain Beaulieu, *The Reign of Nabonidus, King of Babylon 556-639 B.C.*, Yale Near Eastern Researchers, vol. 10 (New Haven: Yale U, 1989), 149-202.

<sup>&</sup>lt;sup>15</sup> Shea, "Nabonidus Chronicle," 12-13.

<sup>&</sup>lt;sup>16</sup> For two representative examples see J. A. Montgomery, *The Book of Daniel*, International Critical Commentary, reprint ed. (Edinburgh: Clark, 1979), 371; L. F. Hartman and A. A. Di Lella, *The Book of Daniel*, Anchor Bible (Garden City: Doubleday, 1978), 23:243.

rifices were being offered in Jerusalem, and even if they had been, it is not certain that Daniel would have known their exact timing.

The sacrifices that he did know about were those that took place in Babylon. In no way endorsing their validity, Daniel could still use them as an ordinary marker for time. It probably was then, the time of the evening sacrifice in Babylon, that Gabriel's answer to Daniel's prayer came to him.

Saggs describes the animal sacrifices in Babylonian temples as taking place twice a day in pairs of offerings: "the gods enjoyed regular meals, two or—in some places in the late period—four a day, a 'great' and a 'little' meal, morning and evening, placed on tables before the divine images."<sup>17</sup>

The animals sacrificed in these meals included sheep, oxen, calves, and lambs. A variety of other foods were also offered to the gods to go along with the meat entree. What was done with these animal sacrifices? "The meal was technically a banquet to which other deities were invited, and at which the human worshipers and even the dead might be present. The gods themselves received specified parts of the animals, both in the daily offerings and special sacrifices, the remainder going to the *king*, the priests, and the temple staff [italics mine]."<sup>18</sup>

This then presented an opportunity for the priests of Marduk to get their revenge. When the king was presented with his portion of the "evening sacrifice" referred to by Daniel, there was an added ingredient in it—poison. The priests and the temple staff obviously avoided the contaminated portion.

The result: the king died that night, 8/11. This is recorded by the Nabonidus Chronicle both with regard to the date and the time on that date, at night. This is a rare, indeed virtually unique reference to the time of a king's death. The poison ingested with his portion of the evening sacrifice did its work, and he died that night. A general aged 62, in previously good health, strong enough to lead a conquering army three weeks earlier and to welcome Cyrus but a week before, dies suddenly after ingesting his portion of the evening sacrifice; a very suspicious circumstance. If we had his body to assay, it probably would show that it was well laced with one kind of poison or another.

It may at first appear paradoxical that a king who prohibited prayers to the gods should then partake of a sacrifice offered to them. In spite of the prohibition against prayers, the sacrifices undoubtedly continued. These two liturgical functions served different purposes. Prayers served the purpose of gaining an answer to those petitions for the benefit of the person offering them. Sacrifices, on the other hand, were for the benefit of the gods. The gods were hungry, and they had to be fed. If they were not fed, they could turn upon the population and the country and cause all kinds of havoc. One did well, therefore, to continue sacrifices, even if prayers were suspended.

 <sup>&</sup>lt;sup>17</sup> H.W.F. Saggs, *The Greatness That Was Babylon* (New York: Hawthorn, 1962), 371.
 <sup>18</sup> Ibid.

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If this had been a normal meal in the palace that had been poisoned, then Darius' cupbearer might have borne the brunt of the assault, unless he was in on the plot. But this was no ordinary meal; this one came directly from the gods, and it may have been eaten on the spot. Surely there could not be anything wrong with it, could there? Wrong. The special nature of the occasion provided the priests with an opportunity that would not otherwise have been offered to them, and it appears that they took it. Ugbaru/Darius the Mede died in the night on 8/11, probably after ingesting poison that came to him with the evening sacrifice. This probably was the same evening sacrifice to which Daniel referred.

#### Aftermath

**The reason for the prophecy.** It may seem strange that the prophecy of Dan 9:24-27 was given to Daniel at the very time that the king was being served his fatal portion of the sacrifice, but there may also have been a specific reason for it. Theoretically, Daniel could have prayed this prayer, dated in the 1<sup>st</sup> year of Darius the Mede, anytime during the week between 8/4 and 8/11.

We know he did not pray it during the night that he was down in the lion's den, for it is very unlikely that he took the scroll of Jeremiah down there with him. Earlier in the week there was turmoil connected with the new appointment of the governors. Now all of that and its distasteful conclusion appeared to be behind Daniel. Now he could really turn his attention to praying about the fate of his people. Thus, while there are other possibilities during this week, his prayers in the afternoon of 8/11 appear to be the most appropriate time during that week for him to have prayed for them.

Why was the prophecy given in answer to that prayer? Things looked favorable for the exiled Jews. Darius the Mede appeared to be kindly disposed toward Daniel and thus, through him, possibly to his people. But the next morning Daniel woke to find the king had died during the night. Would all of his optimism for the return of his people be dashed by this evil turn of events? No. Gabriel had already assured him the night before that Jeremiah's prophecy of the return would occur, in spite of what happened among earthly rulers. Looked at from this perspective, there would have been no more appropriate time for Gabriel to have brought this assurance. Daniel was already fortified for the events of the morrow.

**Daniel's dating.** One thing he could not do thereafter was, however, to date any more of his prophecies to the First Year of Darius the Mede. The king was dead, and that date formula went out of circulation after this brief use. It was no longer appropriate from 8/12 in 539 B.C. onward.

The Babylonian Gods. One thing from Darius the Mede did live on after his death besides Daniel's knowledge and memory of him. That was his thirtyday decree. This was a law of the Medes and Persians that did not change, even if the king who gave it had died. It is interesting to see in this connection that the Chronicle notes that the gods did not begin to return to their cities until the

 $9^{\text{th}}$  month. The Chronicle does not specify upon which day this process began, but if one were to speculate on the basis of the chronology elucidated above, it would have been 9/6, 30 days after the date that Darius' decree probably was originally given.

#### Summary

The events described above may be tabulated as follows:

- 7/16 Ugbaru/Darius "received" the kingdom of Babylon by conquest (Dan 5:31). He established peace there as military governor (Chronicle, col. III, line 15).
- 8/3 Cyrus arrived in Babylon, greeted by crowds (Chronicle, col. III, line 18b-19).
- 8/4 Ugbaru/Darius "was made king," by Cyrus (Dan 9:1). Ugbaru/Darius "confirmed" by Gabriel (Dan 11:1a).
- 8/5 Cyrus left Babylon in pursuit of Nabonidus.
- 8/6 Ugbaru appointed governors (Chronicle, col. III, line 20). Darius appointd governors (Dan 6:1-2). Darius planned to make Daniel chief governor (Dan 6:3).
- 8/7 Seeing Daniel's appointment coming, the other governors plotted against him (Dan 6:4-5). Darius issued his decree against prayer (Dan 6:6-9).
- 8/8 Daniel, caught in prayer, was reported to Darius and placed in lions' den (Dan 6:10- 17).Darius was "strengthened" by Gabriel that night Dan 11:1b).
- 8/9 Daniel was delivered in the morning (Dan 6:19-23). The plotting officials were killed in lions' den (Dan 6:24). Darius' decree on behalf of the God of Daniel was given (Dan 6:25-27).
- 8/10 Plot against Darius by priests and surviving officials.
- 8/11 At the evening sacrifice Daniel prayed and Gabriel answered (Dan 9:1-27). The plot against Darius was carried out with a poisoned sacrifice.

Ugbaru/Darius died that night (Chronicle, col. III, line 22b).

9/6 Thirty days of Darius' decree ended (Dan 6:7). Gods began to return to their cities (Chronicle, col. III, line 21-22c).

#### Conclusion

H. H. Rowley once wrote that there is no room in history for Darius the Mede.<sup>19</sup> Actually there is room in history for Darius the Mede as king of Baby-

<sup>&</sup>lt;sup>19</sup> Rowley, "Darius the Mede and the Four World Kingdoms (Cardiff: U of Wales, 1935), 53.

# SHEA: THE SEARCH FOR DARIUS THE MEDE (CONCLUDED)

lon, but in progressive studies the size of that room has been reduced from a year and a month, to a month, to a week. That appears to be an irreducible minimum.

When that irreducible minimum is reached, however, it leads to a tight and detailed integration of what is known of these events from Daniel and the Nabonidus Chronicle. The scenario is tight, but neither too tight nor too loose. It makes just the right fit. Once this detailed chronology is adopted, these events can be seen in an explanatory sequence.

Cyrus appointed Darius. Darius appointed governors. Darius intended to appoint Daniel. In plotting against Daniel, the governors unwittingly cast the die for their own death and that of Darius because they used a religious vehicle against Daniel. This trap not only caught Daniel, but it also offended the priests of Marduk. Darius' decree in favor of the God of Daniel only inflamed their anger further. This led to their plot against Darius, which they carried out with a poisoned sacrifice offered to the king. He died that night as a result. In the meantime, Gabriel brought Daniel assurance that even though this earthly ruler might pass off the scene of action, God's plans and purposes for His people would still go forward to completion. And so they did.

In the early days of American television there was a show entitled "Queen for a Day." In it the woman selected as a queen received many gifts and had a variety of privileges, but only for one day. If Darius the Mede had been a participant on that show, he would not have been queen for a day, he would have been king for a week—but what an action-packed week it was! Unfortunately for Darius, that week ended with his death. It is for the reason of the narrow range of this time frame that historians have not found other evidence for his kingship besides the Nabonidus Chronicle and the book of Daniel.

After Darius' death Cyrus left the local throne of Babylon unoccupied, for his tablets there continue to date to him only as "King of Lands." At the end of his accession period Cambyses was installed upon that throne. For one year the tablets written there were dated to "Year One, Cambyses King of Babylon, Cyrus King of Lands" or just "Year One Cambyses King of Babylon." After that year, Cyrus discharged Cambyses from that post, for reasons still unknown to us.

The vassal kingship of Babylon was short lived. Darius lasted there only a week, and Cambyses kept it for only a year. After that it was absorbed into the kingship of the Persian Empire. The end stage of this development was reflected in the combined titulary on the tablets written there, "King of Babylon and Lands."

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# A Scientific Paradigm for the Genesis Flood<sup>1</sup>

Ted Noel & Ken Noel<sup>2</sup>

The Bible asserts the creation of our habitable earth and the life on it occurred within a single week of seven ordinary days (Gen 1:2-2:3)<sup>3</sup> and that a worldwide flood destroyed all terrestrial life except that preserved in the ark

<sup>3</sup> Gerhard F. Hasel, "The "Days" Of Creation In Genesis 1: Literal 'Days' Or Figurative 'Periods/Epochs' Of Time?" *Origins*, 21/1 (1994): 5-38.

<sup>&</sup>lt;sup>1</sup> It is a rare thing for *JATS* to publish what is essentially speculation based on significant but not unquestioned scientific studies and a scientific approach to the flood story of Gen 6–8, but when I received the article I found it thoughtful, thought-provoking, and in line with ATS affirmations. It also fit in well with the theme of this issue. I sent it to referees who are theologians with a strong interest in the topic and to a biologist. They all told me the article should be refereed by those more expert in the field, such as geologists and physicists who make this their specialty. I sought out such referees, and they devoted a good deal of time to reading the article, poking holes in it, and making suggestions. The authors have dealt carefully with the problems and in so doing strengthened the paper. However, they humbly admit that there are difficulties with every flood scenario (though the alternative evolutionary speculations are much less likely to be true). They present what follows not as the final explanation of what happened during the flood, but as what may have happened. Certainly the article would not be accepted for publication in *Science*. However, it will introduce *JATS* readers to a wealth of recent research in the field and present a synthesis of it that I myself find exciting and plausible. Beyond that humans are unlikely to go in this world. –Editor

<sup>&</sup>lt;sup>2</sup> The authors would like to thank some of those who have made this paper possible. Dr. Paul Giem has been a friendly reviewer through the draft stages, adding valuable insights and perceptive criticisms. His work on <sup>14</sup>C has provided a new scientific challenge to Uniformitarian dogma. Next, the anonymous reviewers of the first draft we submitted brought to light the heat calculations by Ross Barnes that had been lost from view, as well as data regarding floods on Mars and true polar wander on Earth. While it would have been convenient to ignore Barnes' work, that would not be good science. We will not further the Lord's work by sweeping inconvenient issues under a rug. Finally, we must give a very special thanks to Dr. John Baumgardner, who gave of his time to help us understand the magnitude of the problem Dr. Barnes exposed. Without his help it would not have been possible to even approach potential solutions to the constraints imposed by cooling new ocean floor. The Lord truly blesses the study of His word written in stone.

# Noel: A Scientific Paradigm for the Genesis Flood

(Gen 6–8).<sup>4</sup> Secular scholars have often scorned these accounts as being nonsensical, having little or no resemblance to the evidence preserved for us in the physical materials of the earth. Many have ridiculed any who choose to believe in a salvation based on the message contained in such an obviously fictional book.

Others have been somewhat more tolerant, while still maintaining that the Bible is not a factual record of history. To this end, Stephen Jay Gould has popularized the idea that science and religion are "non-overlapping magisteria."<sup>5</sup> He states that the Bible is simply not a book from which scientific information may be extrapolated, claiming instead that it speaks of a different reality from which moral import is drawn, but which has no specific physical meaning. Of a similar philosophical bent are theologians who, while not overtly rejecting the divine inspiration of Scripture, deny that the historical accounts necessarily reflect real events.<sup>6</sup> These scholars take Bible stories as fables teaching some underlying moral truth, but otherwise not to be taken seriously.

The conflict between these views may be considered on two levels. The issue obvious to all observers is verification. Can we establish the truth or falsity of the Bible from the evidence in the physical record? While this approach seems attractive to the scientific mind, it suffers from two fundamental flaws. First, regardless of our good intentions, we all approach any body of evidence with biases. These color our interpretation of the evidence. Even a superficial review of the scientific literature devoted to just the question of the Genesis flood will reveal that well-meaning scientists interpret of evidence in different ways.<sup>7</sup> The apologetic literature merely magnifies this chaos. Even more difficult to surmount is the fact that regardless of whether one supports atheistic evolution or the biblical account, the events in question are unique and non-repeatable. Science is only able to give conclusive answers regarding repeatable phenomena. Eyewitnesses are required to testify as to the facts of historical events.

Much more important than verification is salvation. The Bible does not commend itself to us as merely a guidebook for good living. It presents itself as the inspired written guide to how the great controversy between the creator God

<sup>&</sup>lt;sup>4</sup> Gerhard F. Hasel, "Some Issues Regarding the Nature and Universality of the Genesis Flood Narrative," *Origins*, 5/2 (1978): 83-98; Richard M. Davidson, "Biblical Evidence for the Universality of the Genesis Flood," *Origins*, 22/2 (1995): 58-73; John D. Morris, "The Global Flood of Noah's Day," *Vital Articles in Science/Creation*, (May 1999) [The alert reader will note that some of these citations do not give page numbers. We have been able to access a number of articles by internet. While this is convenient, the original page numbers are often lost.]

<sup>&</sup>lt;sup>5</sup> Stephen Jay Gould, *Rocks of Ages: Science and Religion in the Fullness of Life* (New York: Ballantine, 1999).

<sup>&</sup>lt;sup>6</sup> Langdon Gilkey, *Creationism on Trial: Evolution and God at Little Rock* (Charlottesville, VA: UP of Virginia, 1998).

<sup>&</sup>lt;sup>7</sup> Larry Vardiman, "The Sands of Time: A Biblical Model of Deep Sea-Floor Sedimentation," *Creation Research Society Quarterly*, 33 (Dec 1996).

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of the universe and Satan, the originator of sin, has played out in human history. In this battle mankind is doomed to destruction unless God provides a means of salvation. If the purportedly inspired record is less than completely true, how can we know what portions are true and what parts fable? The very authority of Scripture is jeopardized if the flood account is not true.

**The Issue of Evidence:** God has never required man to accept the gospel without evidence. He led his people throughout history by providing for them in ways both personal and miraculous (Acts 7:2–50). Jesus worked many wonders intended to lead toward belief (John 14:11). The apostles recorded their message as eyewitnesses (1 Cor 15:3–8, 1 John 1:1–3, etc.) so that those of us who were not present at the time would have an accurate record. Finally, the Holy Spirit continues today by bringing us to the truth (John 16:13) and providing the continual ministry of the Spirit to bring us to belief (1 Cor 13:8–10).

If God has been as careful in the physical record as He has been in the written record, we should expect sufficient evidence to buttress our faith. Indeed, such is the testimony of Scripture (Ps 19:1–6, Rom 1:20). But secular science has aligned itself almost universally with an evolutionary paradigm that stands in stark contradiction to the biblical record. This schema appears to be well fleshed out, with ultimate origins described for both the universe and life on earth. Steps along the way are proposed, giving uniformitarianism the patina of veracity.

Biblical creationism suffers greatly in this respect in comparison to uniformitarianism. Its reliance on a miracle appears mystical to onlookers.<sup>8</sup> Fortunately, the intelligent design movement has provided good scientific evidence for the reasonableness of divine creation of life.<sup>9</sup> In this respect, the creationist paradigm stands on a firmer scientific footing than the evolutionary, since to date it has proven impossible to assemble the chemical building blocks of life by purely natural means. But to insist on the physical reality of the flood event seems simply too much *deus ex machina*.<sup>10</sup> Biblical creationists are tarred

<sup>&</sup>lt;sup>8</sup> Leonard Brand, *Faith, Reason, and Earth History* (Berrien Springs, MI: Andrews UP, 1997), 58. The term "miracle" need not imply more than an action not explainable within the framework of currently understood science. As Brand points out, much of current science would have been regarded as miraculous a century or two ago. Nothing has changed regarding the laws of nature since then, but our understanding of those laws has increased. In this paper, the term miracle refers to an action taken by the sovereign will of God. It constitutes a divine intervention in the affairs of the world so as to change their course at some point from their otherwise "natural" progression. It may be accomplished either by "natural" or "supernatural" means, as suits His purposes at the moment.

<sup>&</sup>lt;sup>9</sup> Michael J. Behe, *Darwin's Black Box* (New York: Simon & Schuster, 1996); Phillip E. Johnson, *Darwin on Trial* (Downers Grove, IL: InterVarsity, 1993); William A. Demski, *Intelligent Design: The Bridge Between Science and Theology* (Downers Grove, IL: InterVarsity, 1999).

<sup>&</sup>lt;sup>10</sup> Deus ex machina (lit. "God from a machine") is a literary term describing the "miraculous" appearance of a god to determine the final outcome of a Greek or Roman drama. In this

by this semblance of anti-scientific belief. Many of the apologetic efforts by Christians are thus seen merely as reactionary resistance to scientific inquiry. This appearance is reinforced by the lack of a generally workable overall scientific paradigm for the events of the flood. It is our purpose to propose reasonable global mechanisms that can explain the physical evidence in a manner consistent with the biblical record.

The Task: Given the universal nature of a global flood and the impact such an event would have on every aspect of the planet, the challenge is to present an overall picture of what happened without leaving out essential elements. This task can be comprehensive and overwhelming or broad-brush and manageable, depending on the detail in which the picture is viewed. The amount of evidence that can potentially be considered is beyond the ability of any human to master. If every small item is reviewed, the result will be encyclopedic and incomprehensible. For this reason we will limit our discussion to those key issues which we see as useful in establishing our thesis. Some mathematical discussion will be necessary, but for the most part will be left for other papers, since the purpose of this paper is to present a qualitative model of events, not a quantitative analysis of each element. Some lines of evidence will necessarily be left for other discussions.

**Biblical Inferences / Observed Facts:** The biblical accounts of creation and the flood give us a number of statements which may be analyzed to infer pre- and post-flood conditions, both geographic and climatologic. Any proposed model must take into account these elements, as well as observed modern circumstances. Issues such as the presence of unique animal populations in isolated locales such as Australia must also be considered.

The most obvious difficulty presented by the flood narrative is to identify the source of the floodwaters and the mechanism of their removal from the flood. While it is possible that God implemented the flood as a massive series of miracles, this seems to be at odds with the orderly way God has worked in other arenas. We believe it is reasonable to believe that the flood was triggered miraculously, with the remainder of the process proceeding by natural mechanisms. As Vardiman states, "Between God's supernatural interventions in the affairs of the world, He normally allows the physical processes to operate according to the laws of science."<sup>11</sup>

This expectation should not be confused with Deism. Rather, this is a basic belief that God operates in an orderly fashion. He created the natural universe in such a way that miraculous intervention is generally not needed. We believe God would prefer to set natural processes in motion to create and dry up the flood, as opposed to intervening multiple times to create and remove the floodwaters. Natural events will leave traces that can be identified. If the entire

context it refers to an apparently contrived solution to a seemingly insoluble difficulty.

<sup>&</sup>lt;sup>11</sup> Vardiman, "The Sands of Time."

sequence of events were a succession of miracles, the physical record would become impossible for finite man to interpret. This seems contrary to what we understand of God. Our faith in Him is not expected to be blind, but based on evidence. Thus, when we read of a flood, we should naturally expect to find evidence consistent with it.

At this point it is important to understand that we do not believe the biblical account of the flood is true because we can prove it scientifically. Rather, we believe the biblical account because it is God's word. He was there, He caused the flood, and He caused the story to be recorded in Scripture. That story is not a comprehensive account of what happened, but an eyewitness account (even though we don't know how that witness was received by the author of Genesis). It provides hints, clues, a framework into which to fit our investigations.

What Does Not Need to be Explained: While it is important to account for many lines of evidence, there are certain issues the model does not need to explain. By way of illustration, numerous critics have argued that the ark could not have carried enough food for all the animals for a year. Such a naturalistic criticism fails when we recognize that the Bible includes at least two examples of miraculous multiplication of food (1 Kgs 17:9–16, Matt 14:17–20) that can serve as a model for feeding the animals. The ark is clearly a miraculous singularity (Gen 7:8ff), and all elements of it may properly be attributed to the miracle without harm to the model in general.

It is similarly unnecessary and perhaps even unwise for the model to address lines of evidence affecting only localized geographic areas. The fossilized forests of Yellowstone may very well be evidence for the fact of the flood, but they add little to the understanding of global mechanisms, and as such are better left for papers with a more detailed geographic focus.<sup>12</sup>

Certain bodies of data, such as radiometric dating, have been thought to contradict the young age of life on earth that is an intrinsic part of the biblical record. Qualified commentators have shown that these conclusions are not as secure as long-ages advocates claim.<sup>13</sup> Therefore, it is neither necessary nor appropriate to deal with them here, except as they directly impact on the global

<sup>&</sup>lt;sup>12</sup> Harold G. Coffin, "The Organic Levels of the Yellowstone Petrified Forests," *Origins*, 6/2 (1979): 71-82; Harold G. Coffin, "Mt. St. Helens and Spirit Lake," *Origins*, 10/1 (1983): 9-17; Harold G. Coffin, "The Yellowstone Petrified 'Forests'," *Origins*, 24/1 (1997): 2-44.

<sup>&</sup>lt;sup>13</sup> Russell Akridge, "Radiometric Dating Using Isochrons," *Vital Articles on Science/Creation*, (Nov 1982); Paul A. L. Giem, *Scientific Theology* (Riverside, CA: La Sierra University Press, 1998), 111-190; Larry Vardiman, Andrew A. Snelling, Eugene F. Chaffin, eds., *Radioisotopes and the Age of the Earth* (El Cajon, CA: Institute for Creation Research, 2000). These, and other authors, have shown that there are scripturally consistent interpretations of all radiometric-dating techniques, while ignoring none of the scientific data. This should not be taken as implying that the debate over long ages is resolved. Much scientific work remains. However, the commonly argued "secure conclusion" of long ages for life on earth based on radiometric data should not be accepted as unassailable.

flood model.

We should also be aware that for this paradigm to be a valid statement of a scientific theory, it should be falsifiable. That is, it should provide the framework for scientific predictions that can be tested and possibly proven to be incorrect. If the theory fails when tested, then the theory, in whole or part, is incorrect and must be discarded or replaced by a more correct theory.

It is not necessary for this paradigm to be completely correct in order to be useful. Many scientific theories of the past have been useful, providing means for assembling testable constructs. As new information became available, these theories have been discarded in favor of more correct or even contradictory schemata. This paradigm's value will be determined by how well it correlates present data and serves to direct investigation that reveals new information.<sup>14</sup>

#### **Pre-Flood Conditions**

**Seasons:** In Eden, we are presented with a Paradise that is unequaled except in the promises of the Kingdom. Adam and Eve were comfortable without clothes. After the fall they were clothed because of nakedness (Gen 3:7), allowing us to infer that clothes were not yet needed for protection or thermal stability. Such comfort requires that there be very little temperature change either from month to month or from night to day.<sup>15</sup> Similarly, there should be little wind, because wind would cause chill and discomfort.<sup>16</sup>

The human diet in Eden was recorded to be grains and fruits (Gen 1:29–30). There is no hint of these being "in their season," as is suggested later (Gen 8:22). This allows us to reasonably infer that the fruiting of food plants in Eden continued year-round, unlike modern plants that predominantly bear seasonally. Temperate thermal stability and year-round fruiting suggest that the pre-flood world had no seasons. This would have only been possible with a near-vertical axis of rotation of the earth, so that days and nights were of near-equal length year-round.<sup>17</sup>

Some would take the text of the flood story itself as strongly hinting that seasons began after the flood. When Noah left the ark, God told him that "seedtime and harvest, And cold and heat, And summer and winter" would not

<sup>&</sup>lt;sup>14</sup> Brand, 56.

<sup>&</sup>lt;sup>15</sup> Arthur C. Guyton, *Textbook of Medical Physiology* (Philadelphia: W. B. Saunders, 1971), 837. The naked human body is capable of maintaining a normal core temperature over a wide range (about 60-130° F), but the extremes of this range involve considerable adaptive maneuvers (shivering when cold, hyperventilation when hot, etc.) not compatible with comfort.

<sup>&</sup>lt;sup>16</sup> Ibid., 833. A 4 mph wind will increase convective heat loss by three times compared to still air, and double compared to a 1 mph breeze. We may discount suggestions that Adam and Eve were furry, as the only suggestion of great hairiness in the book of Genesis is in the story of Jacob and Esau, where Esau was hairy "like a hairy garment" (Gen 25:25). The fact that Esau was specifically noted to have this characteristic suggests that it was unusual, and would thus not be an expected characteristic of Adam and Eve.

<sup>&</sup>lt;sup>17</sup> Peter Van de Kamp, *Basic Astronomy* (New York: Random House, 1952), 67.

cease thereafter (Gen 8:22). While this inference may in fact be true, we must be cautious in taking this passage that far, because the same verse says that "day and night" would not cease. If this text implies new seasons, then it could also imply new days and nights, something which we know to be incorrect from the story of creation (cf. Gen 1:5, 8, 13, 19, 23, 31). Therefore we must rest this conclusion on other data.<sup>18</sup>

**Weather and Geography:** Extrapolation of modern weather forces to Eden is problematic, as will soon become evident. The daily presence of mist that watered the ground suggests a first approximation of the conditions present in the pre-flood world. Air is capable of holding less water when cool than when warm. Under normal conditions, the atmosphere cools 5.6 degrees Fahrenheit per thousand feet of elevation change.<sup>19</sup> If the ground level temperature is 10° F above the dew point (the temperature at which humidity exceeds the ability of air to hold water), then clouds will form at 1,786 feet above ground level (AGL).

When the temperature in Eden cooled at night to the dew point, mist or fog would form. If Eden were the highest point on earth, then lower elevations would be expected to not have dew unless Eden were cooler than the dew point. How much cooler Eden must be would appear to be dependent on the elevation of Eden above sea level.

If Eden was 4,000 feet above mean sea level (MSL), then the night temperature in Eden would need to be 22.4° F below the dew point in order for the coastline to have dew if weather forces functioned as they do today. But this would leave us with Eden near the base of clouds all the time, a situation unlike what would normally be expected of a paradise. If we place the dew point  $11.2^{\circ}$ F cooler than in Eden in the day, so that clouds begin forming at 2,000 feet AGL (6,000 feet MSL) then we have a 33.6° F day/night temperature variation. But if this were the case, we would find this temperature swing to be beyond human normothermic limits without protective clothing. This suggests a highest likely elevation for Eden below 2,000 feet MSL.

Genesis 2:6 describes a "mist (that rose) from the earth" over "the whole surface of the ground." This would be described today as ground fog.<sup>20</sup> Ground fog persists only in still air, since even small amounts of wind will cause it to dissipate. Therefore the night air in Eden was relatively still.

Another conclusion may be drawn from this seemingly insignificant datum. There were no substantial high mountains in the ante-diluvian world. We say this for two reasons. First, if the general nature of weather in Eden were similar to modern times, the humidity would cause a high mountain to be constantly

<sup>&</sup>lt;sup>18</sup> Gen 1:14 has been suggested to imply seasons before the flood, since the sun and moon were made "for seasons." The Hebrew word *moed* used here speaks of festivals and observances, and is never used to refer to the seasons of the year. Therefore we may disregard this suggestion. <sup>19</sup> Robert N. Buck, *Weather Flying* (New York: Macmillan, 1978), 7.

<sup>&</sup>lt;sup>20</sup> Michael Hasel, personal communication.

shrouded in cloud. Such a feature seems out of place in the narrative as given. Also, high mountains create weather. Air moving against mountains is lifted and cooled, resulting in clouds and precipitation. This creates complex airflows that are incompatible with the calm climate of Eden.

Second, Scripture commonly describes the abode of God on earth as Mount Zion. This figurative language suggests that, at least in the theological sense, this is the highest point on earth. Eden was the original home of God on earth, where he visited with Adam and Eve and where the Tree of Life was located (Gen 3:22). God "shakonned" the angel at the gate of the Garden (Gen 3:24), using the same Hebrew root that describes the glory of God in the Most Holy Place of the tabernacle. When we add the fact that a river flowed out of Eden, becoming four which flowed to four major geographic areas (Gen 2:10–14), we have a physical suggestion that Eden was the highest point of the earth.<sup>21</sup> Based on the physical constraints already discovered about the elevation of Eden, this strongly suggests that no substantial high terrain existed before the flood.

When we consider the water requirement for the flood, the possible elevation of Eden lowers considerably. Every hundred-foot increase in elevation would require a hundred-foot increase in the floodwaters. This depth converts to 3.8 million cubic miles of water, when spread over the earth's surface. Such a large water requirement militates against ante-diluvian high ground.

The river suggests the presence of a feature that will become important later: a large subterranean aquifer. Most rivers have their origin in higher elevation water stores, such as rain runoff or snowmelt. With no such sources available, the river of Eden must have begun at an artesian spring fed by subterranean sources.<sup>22</sup> Water from the surface would percolate down to warmer depths, where the heat of those depths would drive the water back to the surface. Just as the underground plumbing in Yellowstone and Iceland forces hot water to the surface, underground plumbing could readily have been arranged to provide for a hydrologic cycle with steady flow and continuous recirculation.

The "Vapor Barrier": The difficulty of reconciling modern weather forces

<sup>&</sup>lt;sup>21</sup> B. Biju-Duval et al., "Geology of the Mediterranean Sea Basins," in Creighton Burk, Charles L. Drake, *The Geology of Continental Margins* (New York: Springer-Verlag, 1974), 714. The text itself does not directly state that the four rivers watered the whole earth, but merely indicates regions where they flowed. When we note that only one text in Scripture indicates a compound direction (Dan 11:44), and there are numerous statements involving the concept of the "four corners of the earth" (Isa 11:12, etc.) or the "four winds" (Jer 49:36, etc.), we may legitimately suggest that the intent is to describe rivers flowing to the four cardinal points of the compass. It is difficult to be dogmatic about this, since the modern Tigris and Euphrates rivers both flow to the east, although this may be an artifact of the geographic changes brought about by the flood. No modern equivalent to the land of Havilah (Gen 2:11) exists, but B. Biju-Duval et al. note that an ophiolitic complex containing onyx and gold extends across the Mediterranean. This suggests that Havilah was west of Eden.

<sup>&</sup>lt;sup>22</sup> The word for river used in Gen 2:10,  $n\bar{a}h\bar{a}r$ , is used in Job 28:11 for an underground source of a river.

with the climatological conditions in Eden leads us to consider a more potent climatological thesis. Gen 1:6-7 describes the separation of the "waters below the expanse" ("firmament" KJV) from the "waters above the expanse." Dillow and others have suggested that this implies an invisible "vapor barrier" at high altitude which later provided the water for the flood.<sup>23</sup> If the vapor barrier were clear, however, as proposed by Dillow, "This would imply a significant potential for global circulation . . . If strong global circulations exist, it is likely that strong winds and storms would also exist."<sup>24</sup> Some have argued that such a vapor barrier is impossible due to physical instability.<sup>25</sup> Vardiman and Bousselot have shown that if the vapor barrier contained enough water to contribute significantly to the flood, it would cause surface temperatures above boiling and eliminate all life on earth.<sup>26</sup> They did, however, find that if a high cirrus cloud cover were added, the temperature would moderate. They note further that, "As the cloud layer thickens it becomes opaque to the solar radiation and the cloud layer becomes the heating source for the atmosphere and the surface below, rather than the surface of the earth. Because the longwave radiation is trapped between two layers in equilibrium, the cloud and the earth's surface reach equilibrium and the temperature in between becomes isothermal."<sup>21</sup>

A high cloud cover could provide a temperature inversion in which no cooling occurs as elevation increases. Vardiman notes that "In the pre-flood atmosphere the inversion would have been very strong and the pole-to-equator temperature difference would have been very small, resulting in light winds, no storms, and no rain!"<sup>28</sup> This is exactly the situation found on the planet Venus, where a permanent cloud cover is present with very stable temperatures below the clouds pole-to-pole, and virtually no wind. Above the clouds conditions

<sup>&</sup>lt;sup>23</sup> Joseph C. Dillow, *The Waters Above: Earth's Preflood Vapor Canopy* (Chicago: Moody, 1981). The essential character of this construct was that of a transparent blanket of pure water vapor encircling the earth above the atmosphere. Dillow chose the vapor equivalent of 40 feet of liquid water, assuming 1/2 inch of rain per hour for forty days (Gen 7:12). Mathematically, this suggests an atmospheric pressure slightly above twice today's and a vapor layer beginning at 7 km extending up to about 55 km.

<sup>&</sup>lt;sup>24</sup> Larry Vardiman and Karen Bousselot, "Sensitivity Studies on Vapor Canopy Temperature Profiles," *Fourth International Conference on Creationism*, (Aug 3-8, 1998).

<sup>&</sup>lt;sup>25</sup> Kevin L. O'Brien, *The Fatal Flaws of the Noachian Deluge: An Analysis of the Physical, Thermodynamic, and Environmental Affects of the Flood of Noah* (Aurora, CO: Self-published, 2000) http://biochemborg.50megs.com/KLOB/webpages/fatalflaws.htm.

<sup>&</sup>lt;sup>26</sup> Vardiman and Bousselot.

<sup>&</sup>lt;sup>27</sup> Ibid. Vardiman and Bousselot also note that "This would be a very strange world—uniformly cold at a temperature slightly above freezing, extremely stable, and dark, with little or no visible light." This places a cautionary hand on our premise, but since these authors admit that many other simulations need to be undertaken with varying conditions, it is not unreasonable to expect that the trend of their investigations will lead to a set of conditions which would be consistent with Eden. It is not the task of this paper to identify the specific input parameters that yield that result.

<sup>&</sup>lt;sup>28</sup> Larry Vardiman, "The Sky Has Fallen," Vital Articles on Science/Creation, (Feb 1984).

vary wildly from day to night with high winds and large temperature variations.<sup>29</sup>

Such a visible cloud layer makes more sense to us biblically and physically than a clear vapor barrier. Separating the "waters below" from the "waters above" suggests that "waters above" could be directly observed, and most likely would be seen as clouds. Birds flew in the "expanse," indicating that it was the atmosphere (Gen 1:20).

Clouds do not remain clouds in the modern world. They form, cause rain, and dissipate. This is a result of two forces acting on the earth. First, the sun warms the earth unevenly. Sunlight striking clouds is partially reflected away into space and does not contribute to surface warming as much as sunlight directly radiating the surface. Differential heating leads to vertical movement of air.<sup>30</sup> If the air is humid, as it rises clouds form and then rain falls, causing strong downward movement of the air. In the most violent form of this we see thunderstorms with cloud tops as high as 60,000 feet containing vertical currents approaching one hundred miles per hour. Such action creates a strong vertical mixing of the atmosphere. Differential heating also occurs as we move from the equator to the poles or at high elevations. Sunlight reaching the surface at the poles must travel through a greater amount of air than at the equator. This leads to reduced surface warming at the poles. Cool air will tend to sink at the poles and flow toward the equator, where the air is warmer in patterns determined by Coriolis forces. High elevation also reduces the amount of atmosphere through which sunlight must travel, leading to increased surface heating. The absence of high terrain in the pre-flood world would limit this effect.

The second force that creates weather is orographic lifting. Air moving

<sup>&</sup>lt;sup>29</sup> "Venus," *Microsoft Encarta 98 Encyclopedia* (Redmond, WA: Microsoft, 1998); R. G. Prinn, "The Sulfur Cycle and Clouds of Venus, in *Recent Advances in Planetary Meteorology, Seymour Hess Memorial Symposium—IUGG General Assembly, August 18-19, 1983* (New York: Cambridge University Press, 1985), 1-15.

<sup>&</sup>lt;sup>30</sup> John Gabriel Navarra, *Atmosphere, Weather, and Climate* (Philadelphia: W. B. Saunders, 1979), 120-130. Differential heating is the result of differing reflectivity or "albedo" of various kinds of terrain. A sandy beach may reflect as much as 79% of solar radiation back to space, while the adjacent water will absorb as much as 97%. The global average albedo, or reflectivity, as measured by satellites, is in the range of 29-34%. A practical example of differing albedo is found on the final approach to runway 25 at Orlando Executive Airport, where a lake is situated about 100 yards from the approach end of the runway. Pilots must add power to deal with cool sinking air over the lake, and immediately remove power on passing the shoreline because of the warm rising air over the land. Chicago's Midway Airport, located in Lake Michigan, and Toronto's Island Airport, situated in Lake Ontario, present similar situations for pilots. In a similar vein, we may note that hurricanes form over ocean rather than desert, pointing out that the amount of water on the surface contributes to weather. While this is true *prima facie*, in the final analysis differential heating becomes the major determinant of weather, because without it the differential evaporation that leads to humidity-related storms (thunderstorms, hurricanes, etc.) would not occur.

against rising terrain cools as it rises, precipitating water leading to rain and vertical mixing. Air moving over orographic features also creates a downward flow on the lee side of the high ground, again yielding vertical mixing. Differential heating and orographic features are responsible for all weather on earth.<sup>31</sup>

If all terrain were low, there would be no substantial orographic features to contribute to weather. A world wide cloud cover would prevent direct sunlight from reaching the surface. This would eliminate direct surface heating, which would otherwise lead to vertical mixing of the atmosphere. Without such heating, there would be no force acting to produce rain by lifting moist air to altitudes where its temperature would fall below the dew point. And without rain, there would be none of its associated vertical mixing to break up the cloud cover. Such weather stability would be required for the climate to be acceptable for unclothed people year round.

A high cloud layer introduces an additional feature of stability. Night/day temperature variation is caused in large measure by daytime heating and nighttime radiation of that heat back into space. But the cloud cover would limit the daytime heating by as much as 50%. At night it would reduce the radiation of heat away by as much as 86%, since the radiation would be reflected back down at night, trapping the thermal energy. There would be some day/night variation, but it would be markedly less than we see today.<sup>32</sup>

The Upper Atmosphere: One feature that will become important later derives from the lack of vertical mixing in the atmosphere. Carbon-14 is formed in the stratosphere through an interaction between cosmic radiation and nitrogen in the stratosphere. This reservoir then loses its <sup>14</sup>C by mixing with the biospheric air (air lower in the atmosphere which contributes carbon dioxide to plant photosynthesis).<sup>33</sup> The upper biosphere (land life plus the oceans at or above the continental shelves) then loses <sup>14</sup>C to the lower biosphere (deep oceans) with a modern residence half-life of 259 years.<sup>34</sup> Without vertical mixing of the atmosphere, there would be very limited physical forces driving <sup>14</sup>C into the biosphere.<sup>35</sup> This would contribute to reduced levels of <sup>14</sup>C in plants and animals of the ante-diluvian world.<sup>36</sup>

<sup>&</sup>lt;sup>31</sup> Richard Taylor, Aviation Weather (Greenwich, CT: Belvoir, 1991), 8-9.

<sup>&</sup>lt;sup>32</sup> Donald W. Patten, *The Biblical Flood and the Ice Epoch* (Seattle: Pacific Meridian, 1966), 197-204.

<sup>&</sup>lt;sup>33</sup> Robert H. Brown, personal communication. The modern half-life of this process is seventy-five years. The mixing results from vertical mixing of the atmosphere.

 <sup>&</sup>lt;sup>34</sup> Robert H. Brown, "Compatibility of Biblical Chronology with C-14 Age," *Origins* 21/2 (1994): 66-79; Giem, 118.
 <sup>35</sup> All isotopes of carbon are chemically identical, so no chemical concentration gradient

<sup>&</sup>lt;sup>33</sup> All isotopes of carbon are chemically identical, so no chemical concentration gradient would exist to mix carbon dioxide from the stratosphere lower into the atmosphere. The very slight mass difference between <sup>14</sup>C and <sup>12</sup>C might provide some driving gradient, but without substantial vertical mixing, the air masses above and below the cloud cover would tend to mix very poorly.

<sup>&</sup>lt;sup>36</sup> This discussion should not be taken as being the only reason that <sup>14</sup>C would be reduced in

**Stellar Objects:** In the text of the fourth day of creation God is described as placing "lights" in the sky (Gen 1:14–16). The "greater light" is to rule the day and the "lesser light" the night. If there were a cloud cover, it would not be possible to observe the sun or moon directly. They would only appear as lights, exactly as described in the creation account. Later in Scripture we see many statements which specifically call out the sun and moon, but none until after the flood. But what should we do with "he made the stars also" (Gen 1:16)? If the sun and moon were not directly visible, then stars would be completely unknown.

There are several places in Genesis which indicate that the original text is of extreme age, and the writer/compiler of the book has added a modern place name so that the readers would understand the current location of the place mentioned.<sup>37</sup> These editorial additions form a literary pattern into which the stars can fit. The post-flood reader would be able to see the stars which Adam and Eve could not see, and the "modern" compiler/editor would need to include them in the total creation which is attributed to God, otherwise some other deity could be invoked as being responsible for them.<sup>38</sup> The form of the edit appears parenthetical and does not necessarily imply their creation on the fourth day, but only requires that they are God's creation.

Genesis 9:13 states that God "set" the rainbow in the clouds as a sign of his promise never to destroy the earth again with a flood. This act of "setting" implies new placement. Rainbows are not possible without rain and clear sky. Thus we may legitimately conclude from both this text and the scientific evidence so far examined that rain was not present in the ante-diluvian world. Unfortunately, we must deal then with Genesis 2:5, which can be taken to imply that rain came as an immediate result of the fall.<sup>39</sup> Here again, as in the question of stars and the fourth day of creation, we may legitimately consider the thesis that the post-flood writer/compiler of Genesis added this phrase to the original text to account for a post-flood observation not germane to a pre-flood audience.

Volcanism: The Bible does not contain the word "volcano." Thus, any argument regarding volcanoes in the ante-diluvian world is logically an

the antediluvian environment. A larger antediluvian biomass would reduce  ${}^{14}C$  levels by dilution. A more powerful geomagnetic field would also reduce  ${}^{14}C$  formation, as would increased humidity. These mechanisms would be expected to work in concert.

<sup>&</sup>lt;sup>37</sup> Gen 14:2, 3, 7, 8, 15, 17; 16:14; 23:2; 35:19.

<sup>&</sup>lt;sup>38</sup> Matthew Henry's Commentary, Genesis 1:16-18; Colin L. House, "Some Notes on Translating יאת הכוכבים in Genesis 1:16," AUSS, 25/3 (1987): 241-248. House suggests this verse should be translated to say that God made the moon to rule the night with the stars, thus avoiding the need for either editorial redaction or explanation of the apparent creation of the stars on the fourth day. This unusual approach is unnecessary if our theory of a high cloud cover is correct. The linguistic issues that House raises will not be addressed here.

<sup>&</sup>lt;sup>39</sup> Randall W. Younker, in John Baldwin, ed., *Creation, Catastrophe, & Calvary* (Washington, D.C.: Review and Herald, 2000), 69-78.

argument from silence. But some inferences may be made which we believe are justified. First, because there probably was no high terrain before the flood, volcanoes are very unlikely to have existed then. Second, because volcanoes create a hot spot on the surface and a cool region in the area of the ash plume, they would cause vertical mixing of the atmosphere. This would be expected to disrupt the temperature inversion, and potentially would destroy the Edenic climate. We therefore conclude that volcanoes came into existence at the flood, as will be discussed.

One other feature of the lack of volcanism bears on the upper atmospheric conditions discussed earlier. The protective ozone layer in the stratosphere is broken down by chlorine from chlorofluorocarbons.<sup>40</sup> With no manufactured CFCs, the only natural source of chlorine would be volcanic.<sup>41</sup> But with no volcanoes to release chlorine into the atmosphere, the ozone layer would be much thicker and far more able to block harmful ultraviolet radiation than at present.

**Summary of Proposed Ante-Diluvian Conditions:** We propose that the pre-flood world was very unlike our present earth. It had a single continent, located generally around the equator, and a single ocean. There was little high ground, and Eden was most likely the highest point. There were no volcanoes. A large aquifer fed an artesian source for the river flowing from Eden that divided to flow to the four corners of the earth. The earth's axis of rotation was normal to the plane of the ecliptic.

The climate was maintained in a constantly temperate and nearly windless condition by a temperature inversion made possible by a high altitude cloud cover. This cloud cover prevented direct observation of the sun and moon, and completely obscured the stars. There was no force to promote the vertical mixing which is characteristic of modern weather. This absence of vertical mixing had the secondary benefit of reduced levels of <sup>14</sup>C in the biosphere. A thick ozone layer prevented harmful effects from solar UV radiation.

#### A Proposed Mechanism for the Flood: Events Consequent to an Axis Shift

It is our opinion that the proximate cause of the flood was a shift of the earth's axis from normal to the plane of the ecliptic to its present inclination of about 23.5°. In order to evaluate the scientific plausibility of this premise, we now present a series of events that would be expected to follow such an event.

<sup>&</sup>lt;sup>40</sup> L. E. Manzer, "The CFC-Ozone Issue: Progress on the Development of Alternatives to CFCs," *Science*, 249 (1990):31-35. The Nobel Prize in Chemistry for 1995 was awarded to Paul J. Crutzen, Mario J. Molina, and F. Sherwood Rowland "for their work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone."

<sup>&</sup>lt;sup>41</sup> Gordon W. Gribble, "Natural Chlorine? You Bet!" *Priorities* 6/2 (1994); Stephen Self, Jing-Xia Zhao, Rick E. Holasek, et al., "The Atmospheric Impact of the 1991 Mount Pinatubo Eruption," *U.S. Geological Survey*, (1994) http://pubs.usgs.gov/pinatubo/self/index.html.

Following this presentation, we will consider evidence for the actual occurrence of those events.

**Gyroscopic Precession:** The earth is made up of a number of layers. For simplicity, we may refer to them as core, mantle, and crust.<sup>42</sup> Of particular interest to us are the mantle and crust. The crust of the land portions of the earth is proportionally as thin as the skin on an apple. The oceanic crust is much thinner. All of the surface features of the earth, both on land and under sea, are part of the crust. Since the mantle is semi-liquid and denser than the continental crust, the continents float on the mantle and are able to move in response to physical forces. We may also note that because the crust is floating, the thicker parts of it, such as mountain ranges, actually extend further down into the mantle, just as an iceberg is mostly under the water it is floating in.<sup>43</sup>

The earth is a gyroscope about 8,000 miles in diameter, spinning on its axis once every twenty-four hours. If such a gyroscope were to be tipped, the resulting precession forces would be nearly incomprehensible. Since the crust is relatively fragile, these massive forces would cause tremendous fracturing of the earth's surface. The semi-liquid mantle would act like a skating rink on which crustal fragments would slide, with the larger fragments moving around at considerable speed. The major potential resistance to movement would be subducted oceanic crustal plates.<sup>44</sup> As fragments slid apart, cracks and subduction would expose the hot mantle. Ocean waters and aquifer exposed to the mantle would then flash into steam. This steam would be contained momentarily by the pressure of miles of water over it, creating immense forces on the sides of the fracture, imparting a massive secondary impulse to the broken continents, accelerating their movement apart.<sup>45</sup> The immense amounts of steam would cause immediate, massive vertical movement of air, with nearly immediate precipitation of at least part of that water as rain. Unfortunately for our thesis, this leaves us with less water on the surface of the earth, not more. A

<sup>&</sup>lt;sup>42</sup> "Inside the Earth," U.S. Geological Survey, (May 5, 1999) http://pubs.usgs.gov/publications/text/inside.html.

<sup>&</sup>lt;sup>43</sup> Frank Press, Raymond Siever, *Understanding Earth* (New York: Freeman, 1998), 490-493.

<sup>&</sup>lt;sup>44</sup> John R. Baumgardner, "Runaway Subduction as the Driving Mechanism for the Genesis Flood," *Third International Conference on Creationism*, (July 18-23, 1994). Dr. Baumgardner shows that runaway subduction would actually facilitate continental movement.

<sup>&</sup>lt;sup>45</sup> This force would be on the order of 46 million tons per lineal foot, calculated as follows.

Critical steam pressure = 3,184 psi (No additional pressure will liquefy steam)

 $<sup>3,184 \</sup>text{ psi} / 0.52 \text{ psi per vertical foot of sea water} = 6,123 \text{ feet depth}$ 

Mantle depth: 50,000 feet

 $<sup>50,000 \</sup>text{ ft} - 6,000 \text{ ft} = 44,000 \text{ feet overburden pressure of sea water}$ 

<sup>44,000</sup> ft / 2 = 22,000 ft average depth of sea water overburden (avoids re-calculation for every foot of vertical depth)

 $<sup>(22,000 \</sup>text{ ft} + 6,000 \text{ ft}) * 0.52 \text{ psi per vertical foot} = 14,500 \text{ psi average}$ 

<sup>14,500</sup> psi x 144  $in^2/ft^2 = 2.1$  million psf average

<sup>2.1</sup> million psf x 44,000 vertical feet = 46 million tons per lineal foot of rift.

worldwide flood cannot occur when water is removed from the surface of the earth. This problem will be addressed below.

The earth's magnetic field, while poorly understood, clearly emanates from the semi-liquid deeper parts of the earth.<sup>46</sup> If the initial tip were accomplished by a force exerted on the surface of the earth, the motion of the mantle and core would proceed by viscous coupling with the crust. Since viscous coupling is not a 1:1 process, this would result in true polar wander.<sup>47</sup> Gyroscopic forces would send the magnetic poles of the earth precessing wildly, since the semi-liquid mantle would allow them to move with minimal restraint when compared to the crust. With dys-synchronous motion of crust and poles in the presence of solidifying ocean floors we should expect to see paleomagnetic reversal patterns in the oceanic crust.<sup>48</sup>

**The Source of the Floodwaters:** Genesis 7:11 describes the "fountains of the great deep" bursting open. Hasel has shown that this text refers to massive geyser-like eruptions of water from the earth.<sup>49</sup> The only possible source of this water is the large subterranean aquifer discussed above. Since the land was floating on the mantle and the aquifer, when this aquifer was vaporized, the land would sink. This would result in a lower ground level and yield a greater amount of surface water, providing a sufficient amount of water to cover all the land, since the initial ground level was quite low worldwide. We may also postulate that portions of the land slid over deeper ocean bottom areas, thus traveling to locations below sea level.

The time course of the flood is of particular interest here. On a single specific day "all the fountains of the great deep burst open, and the floodgates of the sky were opened." This is a sudden, violent event, such as would be expected to follow a sudden violent tipping of the earth. The sequence in the text, where the fountains break open first, followed by the opening of the floodgates of the sky, is a perfect match for the model, even in degree.

**Volcanism:** The next immediate effect of the fracturing of the earth's crust would be volcanism. Magma is portions of the molten upper mantle being ejected to the surface. With so many cracks, an unimaginable number of volcanic eruptions would begin. They would be located mostly at the boundaries of continents, particularly where a continent began to slide over the

<sup>&</sup>lt;sup>46</sup> "The Earth," *Microsoft Encarta 98 Encyclopedia* (Redmond, WA: Microsoft, 1998); Press and Siever, 498-501.

<sup>&</sup>lt;sup>47</sup> Thomas H. Clark, Colin W. Stearn, *Geological Evolution of North America* (New York: Ronald Press, 1968), 115. "Polar wandering implies the shifting of the whole outer crust over the inner part of the earth, and although no mechanism to accomplish this has as yet been suggested, the possibility that it has occurred cannot be rejected." A 1:1 process is one in which a specific motion of one part of a mechanism results in an exactly proportional motion in a coupled part of the mechanism. Since the motion of the crust would be variably different than the motion of the mantle, their motions would not be coupled on a 1:1 basis.

<sup>&</sup>lt;sup>48</sup> Press and Siever, 498-501.

<sup>&</sup>lt;sup>49</sup> Gerhard F. Hasel, "The Fountains of the Great Deep," Origins 1/2 (1974): 67-72.

adjacent ocean floor. These subduction zones would allow magma access to the surface, but only through restricted openings, leading to high-pressure volcanic eruptions.

Massive volcanism would lead to incredible amounts of volcanic ash being ejected into the upper atmosphere where it could persist for a year our more. This would then lower the temperature of the atmosphere by increasing the albedo of the earth, reflecting solar radiation into space rather than allowing it to warm the surface.<sup>50</sup> This has been seen in miniature in modern times when Mt. Tambora erupted in 1815, leading to what is known as the "year without a summer," in 1816.<sup>51</sup> Since the sliding of continents would be unlikely to end immediately, continued eruptions would be likely, and the cooling effect of volcanic ash would be extended. This volcanic activity would also release massive amounts of chlorine, disrupting the ozone layer.

Volcanism would not continue indefinitely. As the sliding of the earth's surface slowed down, subduction would decline. Volcanoes located along subduction zones would subside. Areas of exposed mantle in deep oceanic locations where continents pulled apart would begin to "skin over" as the oceans cooled the surface of the exposed magma.<sup>52</sup> This cooling would reduce the amount of water being vaporized, allowing the rains to decrease (Gen 8:2). By now warm oceans would lead to the death of many types of marine organisms that were adapted to cooler temperatures. The combination of warm oceans and cold atmosphere would lead to more water being evaporated, with more precipitation, some as snow and ice.<sup>53</sup> But with the entire surface of the earth under liquid water all the snow and ice would melt as soon as it reached the surface. The flood would be permanent without one more process coming into play.

**Drying Up the Waters:** The original level of the land was low enough that the "high hills" were covered by at least 15 cubits of water (Gen 7:20). Since the original surface of the earth sank when the fountains of the great deep were broken up, the water did not have to rise to any great depth.

Gyroscopic precession would have fractured the original continent into multiple fragments that would move rapidly around the surface of the globe. As these fragments collided, the impact would thrust up mountains that would rise

<sup>&</sup>lt;sup>50</sup> Michael J. Oard, "The Ice Age and the Genesis Flood," Vital Articles on Science/Creation, (June 1987). <sup>51</sup> "Tambora," Microsoft Bookshelf 98 (Redmond, WA: Microsoft, 1998); "Tambora,"

<sup>&</sup>lt;sup>51</sup> "Tambora," *Microsoft Bookshelf 98* (Redmond, WA: Microsoft, 1998); "Tambora," *Microsoft Encarta 98 Encyclopedia* (Redmond, WA: Microsoft, 1998); Donovan Webster, "Inside the Volcano: Rappel into Hell," *National Geographic* 198/5 (Nov 2000), 50-65.

<sup>&</sup>lt;sup>52</sup> Richard S. William, Thorbjörn Sigurgeirsson, "Lava-Cooling Operations During the 1973 Eruption of Eldfell Volcano, Heimaey, Vestmannaeyjar, Iceland," *U.S. Geological Survey Open File Report 97-724*, (March 22, 2001).

<sup>&</sup>lt;sup>53</sup> Larry Vardiman, "Rapid Changes in Oxygen Isotope Content of Ice Cores Caused by Fractionation and Trajectory Dispersion near the Edge of an Ice Shelf," *Creation Ex Nihilo Technical Journal* (1997).

above the level of the waters. This is exactly the imagery of Psalm 104:6–8, where at the end of the flood mountains are described as "rising up" while valleys "sank down." Because mountains float on the mantle just as plains do, a proportional amount of land below the surface would project down into the mantle.<sup>54</sup> This mass of earth would be drawn from previously low-lying land, thereby reducing the land surface area of the earth, and similarly increasing the area of the ocean surface. This new ocean area would increase the size of the basin into which floodwaters could recede. If the new mountains had elevations above 24,000 feet above sea level, the air temperature would always be below freezing, even in summer.<sup>55</sup>

The new mountains would provide a place for frozen precipitation to land and stay without returning to the floodwaters. If they occupied a large land area, they would be able to accommodate a large volume of solid water. This process would take place on all high upthrust mountains, and would cause the ocean level to recede (Gen 8:3). As the water level declined, more high terrain would become available to hold snow, and the recession of the flood would accelerate. Thus, the first terrain that would become visible would be high mountains (Gen 8:5).

Volcanic ash in the upper atmosphere cooling the earth would hasten the precipitation of snow and ice. Snow levels would readily come down to lower levels than those we currently see. Eventually, as warm oceans continued to evaporate water and cold atmosphere precipitated snow, we should expect to find sea levels substantially lower than present, with ice sheets extending across large areas.

The precipitation of water as snow and ice would set up large-scale atmospheric convection. Mountainous areas with snowfall would see descending air, which would then move across the land toward the ocean, where the air would be re-warmed and rise again, carrying more water toward the mountains, where it would again be deposited. An observer on the surface would note a wind (Gen 8:1).

Because the earth was cooled due to the upper atmosphere volcanic ash, we would expect to see global warming as the ash fell back to earth. This would begin melting the edges of the ice packs. As this ice melted, it would refill the oceans. Since some ash would fall almost immediately, we should expect to see it in layers of ice deposited throughout the early drying period of the flood.

The presence of high ground after the flood is essential to the lasting survival of life on land. The amount of water on the surface of the earth is sufficient to cover the earth 3-km deep, if all the crust of the earth were to be

<sup>&</sup>lt;sup>54</sup> Press and Siever, 490-493; G. A. Milne, J. L. Davis, Jerry X. Mitrovica et al., "Space-Geodetic Constraints on Glacial Isostatic Adjustment in Fennoscandia," *Science*, 291 (Mar 23, 2001): 2381-2385.

<sup>&</sup>lt;sup>55</sup> William K. Kershner, Instrument Flight Manual (Ames, IA: Iowa State UP, 1977), 136.

leveled.<sup>56</sup> Before the flood, a very large amount of this water was sequestered as aquifer. Without new high ground to rise above this new water level, the earth would become re-flooded. Therefore, all the landmasses of the earth must be substantially higher than ante-diluvian earth, further contracting the earth's land area beyond that contributed by mountainous areas.

The warming of oceans due to exposure of hot mantle as the continents separated would offset the cooling due to atmospheric ash. The exact balance of these opposite influences would be difficult to predict *a priori*. However, given God's concern even for fallen mankind, we would expect that these forces would tend toward a net isothermal status.

**Cloud Cover:** The atmospheric conditions that existed prior to the flood would be cataclysmically altered. Geysering of the fountains of the great deep would initiate massive vertical air movement, creating great holes in the cloud cover. The evaporation and rain that would follow would tear more holes in it, so that by the end of the forty days of rain (Gen 7:17), no remnant of the original protective cloud cover would remain. Two processes would prevent the cloud cover from re-forming.

First, we have noted volcanism. Even dormant volcanoes present significant elevation changes, and air moving against high ground creates weather. This air movement would produce vertical mixing of the atmosphere. Volcanic eruptions would also initiate vertical air movement. Second, the upthrust mountains would accumulate snow, producing the complex vertical convection mixing just noted as well as orographic lifting. The combination of these forces would prevent a uniform cloud cover from forming. Gaps in the clouds would then promote differential solar heating, making re-formation of a uniform cloud cover impossible.

Weather: Differential heating and orographic features that prevent the vapor barrier from re-forming would create complex weather patterns. Higher elevations and locations distant from oceans would see higher diurnal temperature variations. High elevations would receive greater daytime solar heating, but at night would re-radiate more heat back into space, both because of less atmospheric thickness above them and the absence of a cloud cover. Locations removed from oceans would see more variation because they would have less exposure to the temperature moderating effects of large bodies of water.<sup>57</sup> The uniform conditions that were present pre-flood would be forever lost. Complex weather patterns would be the rule.

**Stratospheric Factors:** The massive chlorine release from volcanoes would destroy the ozone layer. It would only re-accumulate to the extent allowed by the balance between formation of new ozone, the dispersion of ozone by vertical

<sup>&</sup>lt;sup>56</sup> Lambert Dolphin, "Physics and the Bible: The Terrible Flood of Noah," (Koinonia House Online, 1997) http://www.khouse.org/articles/technical/19970601-12.html

<sup>&</sup>lt;sup>57</sup> Encyclopedia Britannica, op cit; Navarra, 120-134.

mixing of the atmosphere, and the volcanic production of chlorine. This would lead us to expect complex and changing patterns of ozone in the stratosphere.

The massive vertical mixing of the atmosphere during the flood would thoroughly mix stratospheric air with biospheric air. This would bring <sup>14</sup>C down into the biosphere in amounts far surpassing its prior levels.<sup>58</sup> Because carbon dioxide (the most common form of carbon in the atmosphere) is very soluble in water, most pre-existing <sup>14</sup>C would wash into the oceans during the flood. This would prevent a spike in atmospheric <sup>14</sup>C concentrations just after the flood. But the complex weather patterns after the flood would ensure that atmospheric mixing would continue to be perpetually thorough. <sup>14</sup>C would then distribute into the biosphere at a much higher rate than the trace pre-flood levels and would rise exponentially until it reached a new steady state level.

While the ultraviolet radiation blocked by ozone has little direct effect on humans other than sunburn and skin cancer, it has many effects on lower forms of life.<sup>59</sup> The ecology of microorganisms would be expected to change significantly so that we would expect to see increased prevalence of pathogens. Viruses would also be affected, and are able to directly insert mutated DNA into host organisms.

Rising <sup>14</sup>C levels would be expected to have more direct effects. When <sup>14</sup>C decays, it becomes nitrogen 14. If an atom of <sup>14</sup>C in DNA were to decay to <sup>14</sup>N, it is likely that the DNA would be damaged.<sup>60</sup> It that DNA were in a germ cell, it could result in a mutation which would be inherited by succeeding

<sup>&</sup>lt;sup>58</sup> Brown, "Compatibility of Biblical Chronology with C-14 Age." Again we do not suggest that low concentration of <sup>14</sup>C in the biosphere was due solely to poor mixing of stratospheric air with biospheric air. Other factors that are very likely to reduce <sup>14</sup>C levels include high humidity, increased geomagnetic field strength, and a much larger biomass in the antediluvian world. The first factors would reduce production of <sup>14</sup>C, while the larger biomass would produce a dilutional effect because a given mass of <sup>14</sup>C would be distributed through more carboniferous mass than at present. The concentration of <sup>14</sup>C would therefore be lower, even though the absolute mass might not be as small as the levels might seem to indicate.

 <sup>&</sup>lt;sup>59</sup> R. C. Smith, B. B. Prezelin, K. S. Baker, et al, "Ozone Depletion: Ultraviolet Radiation and Phytoplankton Biology in Antarctic Waters," *Science* 255 (1992): 952-959; A. M. Vogelmann, T. P. Ackerman, R. P. Turco, "Enhancements in Biologically Effective Ultraviolet Radiation Following Volcanic Eruptions," *Nature* 359 (1992): 47-49.

<sup>&</sup>lt;sup>60</sup> Supplement to ES310, Introduction to Naval Weapons Engineering (Annapolis, MD: United States Naval Academy, Jan 2000); Beth A. Montelone, Supplement to BIOL400, Human Genetics (Manhattan, KS: Kansas State U, 1998). Many "mechanisms" of mutation are described, but most are merely descriptive, with no causative information. Robust biochemical mechanisms exist to correct almost all new genetic defects, but for reasons which have not been elucidated, these are less than perfectly successful. Deamination, oxidation, and alkylation all result in unrecoverable genetic errors. But many more errors exist that should never occur, such as frameshifts, missenses, and nonsenses. While <sup>14</sup>C has not been explicitly implicated in these errors (nor, for that matter, has any chemical mechanism), because <sup>14</sup>C causes spontaneous chemical changes, it is reasonable to expect that it can be a causal agent in some or all of the mechanisms which till now are described but not causally understood. The first reference cited here does identify <sup>14</sup>C as mutagenic, but without identifying mechanisms.

generations. Similar effects might be seen if the  ${}^{14}C/{}^{14}N$  decay occurred in a transcription enzyme or other critical molecule. Since virtually all mutations are deleterious, this would be expected to result in decreased life spans.<sup>61</sup> The equilibration of  ${}^{14}C$  would take about 1,100 years, and its biological effects would be expected to result in an exponential decay in life spans over that period.<sup>62</sup>

**Summary of Expected Flood-Era Changes:** We propose that the gyroscopic precession from tipping the earth would fracture the pre-flood continent. This would immediately break up the aquifer of Eden. This translocated water would then provide enough volume to submerge all the landmass after the overlying land sank into the space previously occupied by the aquifer. Moving continents would override oceanic plates, subducting them and initiating massive volcanism. Eventually continental collisions would thrust up mountains.

Hot new ocean floor would vaporize large amounts of water, while volcanic ash cooled the upper atmosphere by blocking solar heating. Snow and ice would fall on high mountains, removing water from the flood. This process would continue for an extended period until the sea level fell, volcanism subsided, and the ocean floor cooled. As sea level fell, lower elevations would be covered with ice, creating an ice age. Warmer ocean temperatures would cause extinction of marine organisms unable to tolerate warmer temperatures.

The post-flood atmosphere would become chaotic, with thorough vertical mixing. Differential heating and orographic features would guarantee that the protective cloud cover and temperature inversion would not be re-established. Genetic degeneration from loss of this protection would be expected to show up as an exponential decline in life spans. Eventually as solar radiation impacted on the ice fields, they would melt, transferring water from them back to the ocean.

#### **Observed Post-flood Conditions**

**Geography:** The earth's rotational axis is now tilted about  $23.5^{\circ}$  from vertical. This creates seasonal variations in incident solar radiation, which lead to warm summers and cold winters. Along with this change, the single low elevation continent in existence before the flood has been radically transformed

<sup>&</sup>lt;sup>61</sup> A. Eyre-Walker, P. D. Keightley, "High Genomic Deleterious Mutation Rates in Hominids," *Nature* 397 (1999): 344-347; P. D. Sniegowski, P. J. Gerrish, T. Johnson, A. Shaver, "The Evolution of Mutation Rates: Separating Causes from Consequences," *Bioessays* 22/12 (Dec 2000): 1057-1066; J. Ninio, "Illusory Defects and Mismatches: Why must DNA Repair Always Be (Slightly) Error Prone?" *Bioessays* 22/4 (April 2000): 396-401.

<sup>&</sup>lt;sup>62</sup> Ronald J. Tallarida, Rodney B. Murray, *Manual of Pharmacologic Calculations with Computer Programs* (Springer-Verlag, 1987), 82-89; Paul A. L. Giem, "Carbon-14 Dating Models and Experimental Implications," *Origins* 24/2 (1997): 50-64. Four half-lives are required for equilibration of <sup>14</sup>C levels. With a 269-year half-life of <sup>14</sup>C in the upper biosphere, 1,076 years would be needed to reach steady state. This discounts any other effects that might be expected to cause variation in the simple mathematical model.

into seven with high mountains. The aquifer that underlay the original continent was completely vaporized and no longer exists for us to examine. But examination of Mars shows that floods sufficient to cover the entire surface of that planet to an aggregate depth of 46 meters have occurred, derived from subterranean aquifers.<sup>63</sup> This lends credence to the original existence of the aquifer of Eden.

The concept of continental drift has been widely accepted.<sup>64</sup> The bulk of scientific evidence for continental drift indicates that there was an original single proto-continent centered about the equator.<sup>65</sup> We may also note that this is consistent with Genesis 1:9, where the waters below the heavens were "gathered into one place," possibly implying a single ocean surrounding a single continent. The proto-continent broke up into a number of fragments. These slid from their original positions into their current locations in directions consistent with rapid gyroscopic precession and the interaction of large moving continental masses. Conventional models suggest that this drift occurred over extensive millions of years, but they do not otherwise contradict our model. A number of specific changes may be traced.

There are oceanic basins that did not exist prior to the flood. In particular, the Atlantic Ocean is new. As the Americas pulled away to the west, the mantle became exposed. But because this area was pulled apart, it did not tend to form volcanoes. Instead, in most cases the molten magma flowed out into the ocean bottom. This formed the mid-ocean ridges, where we now find many "black smokers," which are fumaroles under water. Because the magma had wide areas in which to flow, few projectile volcanoes were formed.<sup>66</sup>

In the Pacific Ocean, the opposite is true. Because the western edge of the Americas and eastern edge of Asia were overrunning the existing oceanic crust, subduction zones were formed. In these areas, the downward force of the overriding continent raised mantle pressures so that magma was forced upward to form the many volcanoes we now know as the Ring of Fire.<sup>67</sup> However,

<sup>&</sup>lt;sup>63</sup> Ronald Greely, "Release of Juvenile Water on Mars: Estimated Amounts and Timing Associated with Volcanism," *Science* 236 (1987): 653-654; B. K. Lucchita, H. M. Ferguson, C. Summers, "Sedimentary Deposits in the Northern Lowland Plains, Mars," *Proceedings of the Seventeenth Lunar and Planetary Science Conference, Journal of Geophysical Research* 91/B13 (Nov 30, 1986): E166-E174; V. R. Baker, R. G. Strom, V. C. Gilick, et al., "Ancient Oceans, Ice Sheets, and the Hydrological Cycle on Mars," *Nature* 352 (1991): 589-594.

<sup>&</sup>lt;sup>64</sup> Stuart E. Nevins, "Continental Drift, Plate Tectonics, and the Bible," *Vital Articles on Science/Creation*, (1976).

<sup>&</sup>lt;sup>65</sup> Anatole Dolgoff, *Physical Geology* (Boston: Houghton-Mifflin, 1998), 39-49; Thomas H. Clark, Colin W. Stearn, *Geological Evolution of North America* (New York: Ronald Press Co., 1968), 115; "Continental Drift," *Microsoft Bookshelf 98* (Redmond, WA: Microsoft, 1998).

<sup>&</sup>lt;sup>66</sup> Iceland, the Canary Islands, and the Azores are the best known exceptions.

<sup>&</sup>lt;sup>67</sup> E. Seibold, W. H. Berger, *The Sea Floor: An Introduction to Marine Geology* (New York: Springer-Verlag, 1996), 28. 75% of the world's volcanoes are located in the Ring of Fire around the Pacific rim.

because of runaway subduction, the Pacific floor is also new.68

In areas where continental masses impacted, we find large regions of high mountains. The most notable such area is the Himalayan mountain chain, located where the subcontinent of India slammed into the southern edge of Asia. Others include the Alps and Urals. In the western part of the Americas, the Rockies, Sierras, and Andes were thrust up when those continental masses overrode the submarine portions of the crust which were in their way.

As these areas thrust up mountains, the total horizontal area of the continents decreased. Mountains rising ten times as high as the land did earlier require ten times as much crust extending downward into the mantle to support them.<sup>69</sup> This means the mountainous regions now occupy substantially less horizontal area than their antecedent landmass did. While the mathematics to model the land mass and ocean geography is beyond the scope of this paper, we may confidently state that the horizontal area of the modern landmass is contracted significantly when compared to the pre-flood continent. Such overall upthrust is essential to the survival of terrestrial life, since without it, the total amount of surface water would threaten the existence of dry land.

A second observation must be made regarding the area of upthrust mountains. When the globe is examined, we find that these areas are vast, with the Himalayas alone occupying hundreds of thousands of square miles.<sup>70</sup> This is clearly a sufficient space to deposit large volumes of frozen water to begin the process of drying up the floodwaters. As other mountain ranges came up out of the water, the area available multiplied.

We have noted that mountains create weather by orographic lifting. When wet air comes against them, it is cooled and water precipitates out. Rain will occur in warmer temperatures, or snow in colder. Since there were thousands of volcanoes, which radically cooled the atmosphere, all precipitation over the high ground would be expected to be snow and ice.

**Warm Oceans:** "[T]he average global sea-surface temperature is about  $18^{\circ}$  C."<sup>71</sup> Based on Oxygen-18 measurements of ice laid down either during or just after the flood, Vardiman further notes that the "sea-surface temperature at the end of the Genesis Flood may have been about  $24^{\circ}$  C," or  $6^{\circ}$  C warmer than

<sup>&</sup>lt;sup>68</sup> Baumgardner, "Runaway Subduction"; John Baumgardner, personal communication.

<sup>&</sup>lt;sup>69</sup> The Rockies have numerous peaks of over 14,000 feet MSL. This is about ten times the highest probable ante-diluvian elevation, and significantly more above the average ante-diluvian elevation. If we consider higher ranges such as the Himalayas and Andes, it is possible that the average increase in mountainous elevation may be as much as ten times. There are also numerous high areas, such as the Great Plains east of the Rockies, where many thousands of square miles are at elevations approaching 5,000 feet MSL. Because the crust floats on the mantle, a large volume of crust must protrude into the mantle below these high elevation areas to support them. And just as an iceberg has more volume below the waterline, a mountain has more volume protruding into the mantle than is exposed above.

<sup>&</sup>lt;sup>70</sup> "Himalayas," Microsoft Bookshelf 98 (Redmond, WA: Microsoft, 1998).

<sup>&</sup>lt;sup>71</sup> Vardiman, "Rapid Changes in Oxygen Isotope Content of Ice Cores."

present. Work on <sup>18</sup>O measurements in foraminifera lead to similar conclusions.<sup>72</sup> These data are consistent with our prediction that ocean water would be warmed by contact with hot mantle. The fossil record shows a great extinction of many of the marine species that are present in the Cambrian layer, as was predicted.<sup>73</sup> As the sea temperature increases, we find that the amount of water transported from the ocean to be deposited as snow elsewhere also increases.<sup>74</sup> This water is transported by winds that simulations indicate would be on the order of 45 mph at the surface.<sup>75</sup> This is the "great wind" to which Genesis 8:1 attributes the drying up of the flood.

A Key Difficulty: At this point, we must address a serious challenge to the paradigm that we have been developing. Multiple lines of evidence indicate that the sea floor is of the same age as the flood.<sup>76</sup> As the continents slid, the sea floor ahead of them subducted into the mantle.<sup>77</sup> Hot magma was injected at the mid-ocean ridges and spread to form new sea floor as old crust was subducted. Barnes has pointed out that this presents a serious thermal difficulty.<sup>78</sup> The new oceanic crust had an initial temperature of about 1,100° C. A 6.5 kilometer thick layer of magma this hot contains enough "heat to boil away all the water at the earth's surface 2.8 times." Barnes further calculates that over 250 years would be required to radiate this heat away by black body radiation if the atmosphere were maintained at the boiling point of water. This is obviously incompatible with life on earth, which the Bible clearly speaks of as resuming in relatively normal fashion immediately after the flood. Unfortunately, Barnes is almost certainly underestimating the magnitude of this problem.

The oceanic plates, of which any one is the same age from top to bottom, are not 6.5km thick, but range from 50 to 100km thick. If we assume for simplicity that they are a total of 65km thick on average and the increase in

<sup>&</sup>lt;sup>72</sup> Larry Vardiman, "Out of Whose Womb Came the Ice?" Vital Articles on Science/Creation, (Aug 1994).

<sup>&</sup>lt;sup>73</sup> Robert F. DeHaan, John L. Wiester, "The Cambrian Explosion," *Touchstone* 12/4 (1999): 65-69; L. J. Gibson, "A Catastrophe with an Impact," *Origins* 17/1 (1990): 38-47.

<sup>&</sup>lt;sup>74</sup> Larry Vardiman, "Numerical Simulation of Precipitation Induced by Hot Mid-Ocean Ridges," Fourth International Conference on Creationism, Pittsburgh, PA, (Aug 3-8, 1998).

<sup>75</sup> Ibid.

<sup>&</sup>lt;sup>76</sup> Vardiman, "The Sands of Time." R. Dietmar Müller, Walter R. Roest, Jean-Yves Royer, et al., "Digital Isochrons of the World's Ocean Floor," *Journal of Geophysical Research* 102/B2 (1997): 3211-3214. The problem resulting from new ocean floor is common to all global flood scenarios that accept the stated Biblical chronology. However, we must not casually accept the idea that the entire ocean floor is new, as assumed by Barnes (below). Müller et al. note that "There is a significant area of ocean floor that is older than the oldest mapped isochrons." This may represent pre-flood oceanic plates that were incompletely subducted. Visual estimation of this area from the graphics in Müller's article suggests that they may occupy up to 20% of the ocean floor.

<sup>&</sup>lt;sup>77</sup> Baumgardner, "Runaway Subduction."

<sup>&</sup>lt;sup>78</sup> Ross O. Barnes, "Thermal Consequences of a Short Time Scale for Sea-Floor Spreading," *Journal of the American Scientific Affiliation* 32/2 (1980): 123-125.

temperature with depth is linear, then the total heat load is five times what Barnes proposes. While obviously oversimplified, this demonstrates that dissipation of this heat load is not an inconsequential problem.

At this point we must make one point very clear. No definitive answer is as yet available to Barnes' problem, and no detailed simulations have been published on our proposed approaches to this problem. Thus, the following suggestions, while initially plausible, will require verification. However, in keeping with our faith in God's truthfulness, this cannot be an absolute bar to our thesis. At each step of unraveling the scientific evidence confirming the scriptural record, investigators have approached unsolved problems. Step by step these have fallen away as careful work has resolved difficulties. We believe God will allow this problem to be solved as he has allowed others to be.

We propose that the first step to address Barnes' conundrum is to look at the tectonic changes during the flood. Massive vertical movements of crust accompanied the runaway subduction of the flood.<sup>79</sup> This allowed the mid-ocean ridge to be above sea level. At the edges of the ridge, seawater would be vaporized, leading to strong vertical movement of air. This would drive convection currents at either side of the ridge, tending to create a clear area directly above the ridge. This would allow this extremely hot material to radiate much of its heat directly to space. At 1,100°C this radiation would be 640 times as efficient as black body radiation from steam at 100°C. The exact amount of heat radiated away would depend on the width of the exposed ridge, the temperature of the magma and the time of exposure before it was submerged.

Earlier we suggested that hot magma would "skin over" when exposed to water. This is a solidification of the surface of the magma from rapid external cooling. In a marine convective environment this proceeds initially at about one meter of solidification per day.<sup>80</sup> While the lava is still hot, it has lost a significant part of its excess thermal energy. Heat from below the surface will continue to be conducted to the surface, but as cooling proceeds it slows down, since the heat must be conducted through more thickness of rock. This prolongs the time for the thermal load to be dissipated. The specifics of this cannot be directly predicted, since no extended direct measurements of this process have been made, and most natural systems display non-linear dynamic behavior.<sup>81</sup>

Based on <sup>18</sup>O measurements, Vardiman places the temperature of the entire ocean floor at about 24°C shortly after the flood.<sup>82</sup> He suggests that this

<sup>&</sup>lt;sup>79</sup> John R. Baumgardner, "Computer Modeling of the Large-scale Tectonics Associated with the Genesis Flood," *Third International Conference on Creationism* (July 18-23, 1994); Michael Gurnis, "Sculpting the Earth from Inside Out," *Scientific American*, 284/3 (2001): 40-47.

<sup>&</sup>lt;sup>80</sup> William and Sigurgeirsson.

<sup>&</sup>lt;sup>81</sup> James Flinders, John D. Clemens, "Non-linear dynamics, chaos, complexity and enclaves in granitoid magmas," *Trans R. Soc. Edinburgh Earth Sci*, 87 (1996): 217-224.

<sup>&</sup>lt;sup>82</sup> Larry Vardiman, "Cooling of the Ocean After the Flood," Vital Articles on Science/Creation, (July 1996).

temperature dropped to its present 4°C over about 2,000 years. Such a prolonged cooling period for the oceanic crust would be consistent with maintenance of atmospheric temperature within the bounds required for life. It should be noted that even today the crust has not finished cooling. A layer of magma 100 meters thick requires 300 years to cool to ambient temperature in an air environment.<sup>83</sup> Crustal rock, as determined from bore holes and mines, increases in temperature two to three degrees C per hundred meters of depth. Yet natural caves, even to the depths of Carlsbad Caverns (478m), do not increase in temperature with depth since their surfaces have been exposed for extended periods. This implies that unexposed crustal rock is still cooling.

More speculative mechanisms may be considered. Some researchers have suggested that the antediluvian atmospheric pressure was at least double that at present. This would be necessary for certain prehistoric avians such as pteranodon to be aerodynamically viable.<sup>84</sup> In such a circumstance, water would boil at increased temperature. The resulting steam would radiate energy away more rapidly due to its higher temperature. Also, steam formed at great depths below floodwaters would expand against the extreme pressure of those waters. This pressure would create high-speed steam jets, potentially allowing the resulting steam to reach escape velocity.<sup>85</sup> This steam would carry its heat energy into space as kinetic rather than thermal energy. It would also tend to carry air with it, reducing the earth's atmospheric pressure.

Another option is suggested by Humphreys.<sup>86</sup> The expansion of the universe can become an infinite heat sink into which the crustal heat can be dissipated. If God rapidly expanded the universe at the time of the flood, this extra heat could have simply vanished. To most of us this seems far-fetched, but the underlying physics of this premise are quite well established.

Volcanism: Drifting continents that override oceanic plates are found around the Pacific basin. These continents have large numbers of volcanoes in their subduction zones, exactly as predicted by the movement of continental fragments.<sup>87</sup> While most of the Ring of Fire is now dormant, it is very likely that the bulk of it was created and erupted during the continental motions of the flood. The amount of ash these volcanoes ejected into the stratosphere would be incalculable. And the cooling effect of that ash would be immense.<sup>88</sup> Ash in the upper atmosphere would raise the albedo of the earth, reflecting the bulk of solar

<sup>&</sup>lt;sup>83</sup> Press & Siever, 495-497.

<sup>&</sup>lt;sup>84</sup> Dillow; Larry Vardiman, "The Sky has Fallen," Vital Articles on Science/Creation, (Feb <sup>85</sup> John Baumgardner, personal communication.

<sup>&</sup>lt;sup>86</sup> D. Russell Humphreys, "Accelerated Nuclear Decay: A Viable Hypothesis?" in Vardiman, et. al., Radioisotopes and the Age of the Earth, 333-379 (esp. 369-373).

<sup>&</sup>lt;sup>87</sup> Seibold and Berger, 28.

<sup>&</sup>lt;sup>88</sup> Please forgive the authors for the repetitious use of superlative adjectives. The English language fails of adequate descriptors for the magnitude of the events of the flood.

radiation away.

This would offset atmospheric heating from the cooling of oceanic crust. Oard suggests that the eruptions probably continued for at least a century.<sup>89</sup> This is sufficient time to move large amounts of water to polar ice sheets. It is of interest that the rate of volcanism would be expected to fall off exponentially, in parallel with the heat load.<sup>90</sup> After the volcanism declined, the large ice sheets would be expected to continue to reflect solar radiation away.

An amount of ash sufficient to cool the earth could also darken the surface sufficiently to make it inhospitable to life. But the flood account clearly indicates that Noah emerged from the ark to find clear skies and bright sunlight (Gen 9:13). Vardiman has shown that the winds of the flood would favor a drier, more temperate climate in the region where the ark landed than in the rest of the world.<sup>91</sup> This inhomogeneity would be likely to cause volcanic ash to be thicker in some areas and thinner in others. The remoteness of this region from the Ring of Fire would also allow ash to rain out more simply because of distance. For both of these reasons we find it reasonable to expect that Ararat and its surrounding area would be one of clearer skies than the rest of the world. Since volcanism would decline over time, the area of ash obscuration would similarly contract, leaving behind an expanding region of good land and clear skies for man and animals to occupy.

The massive amount of ice formed in this process would create an "Ice Age." Because the ice would be laid down at the same time as volcanic ash was raining out of the stratosphere, we should find ash in the ice. Volcanic ash is found buried in deep ice layers of Greenland and Antarctica.<sup>92</sup> The extent of the Ice Age as noted by detailed ocean bottom corings was so great that the oceans declined to a level at least 500 feet below modern sea level.<sup>93</sup> Since volcanic ash would continue to promote the deposition of polar snow for at least a century after the flood, the waters of the oceans would recede for at least that long. Once the worst of the volcanic winter ended, the ice could begin to melt.<sup>94</sup> Such a large volume of ice would take a considerable length of time to melt, and some "ocean bottom" would be exposed as dry land for enough time to allow

<sup>&</sup>lt;sup>89</sup> Oard.

<sup>&</sup>lt;sup>90</sup> Vardiman, "The Sands of Time"; Steven A. Austin, "The Declining Power of Post-Flood Volcanoes," *Vital Articles on Science/Creation*, (Aug 1998).

<sup>&</sup>lt;sup>91</sup> Vardiman, "Out of Whose Womb Came the Ice."

<sup>&</sup>lt;sup>92</sup> Larry Vardiman, "Ice Cores and the Age of the Earth," *Vital Articles on Science/Creation*, (April 1992).

<sup>&</sup>lt;sup>93</sup> William Ryan, Walter Pitman, *Noah's Flood* (New York: Simon & Shuster, 1998), 155; E. James Dixon, "Coastal Navigators," *Scientific American Discovering Archeology* 2/1 (2000): 34-35; Michael Parfit, "Dawn of Humans," *National Geographic* 198/6 (Dec 2000): 40-67.

<sup>&</sup>lt;sup>94</sup> "Volcanic winter" is a relative term. It describes the cooling of the earth that results from volcanic ash raising the albedo of the earth. The warming due to heat transfer from the new oceanic crust would offset this to some degree, particularly in the locations of the mid-oceanic ridges.

migration of animals and man.

An examination of hydrologic charts shows that the entire Bering and Chukchi Seas were dry land during this period.<sup>95</sup> Similar evaluation of charts for southeastern Asia and the archipelagoes that extend toward Australia again reveals probable dry land at this time. Other data indicates that the Southeast Asian archipelagoes are actually drowned mountain ranges.<sup>96</sup> Vertical motion of landmasses around the flood epoch later lowered the level of this area. These dry land "bridges" allowed the Americas and Australia to become re-populated after the flood. When the Australian "bridge" flooded, it isolated the animals living there, leaving no way for them to return to the rest of the world. While those types may have lived in other areas at one time, various natural forces such as predation and competition appear to have left Australia as the sole remaining habitat for kangaroos and their similarly unique neighbors.

Archeological evidence of early man in the Americas consistently dates younger than about 13,500 years by conventional <sup>14</sup>C techniques.<sup>97</sup> When adjusted for the accumulation of <sup>14</sup>C after the flood, these dates are consistent with the biblical chronology for a dispersion of man (to the Americas) after of the Tower of Babel incident (Gen 11:1–9).<sup>98</sup>

**Carbon 14:** Conventional <sup>14</sup>C dating assumes that a steady state level of <sup>14</sup>C was present over extended periods of time, implying that measurement of present-day levels can be expected to yield valid ages for artifacts of up to 60,000 years. That assumption is open to serious challenge. As we have seen, in the pre-flood world, the vertical mixing present in today's atmosphere was not present.<sup>99</sup> Therefore, no substantial force existed that would tend to mix <sup>14</sup>C into the lower portions of the atmosphere to be taken up by the biosphere. Brown has also shown that the high humidity of the pre-flood atmosphere would also substantially reduce <sup>14</sup>C production. The large mass of the biosphere would decrease <sup>14</sup>C concentrations by dilution.<sup>100</sup> Some <sup>14</sup>C would be present in the biosphere, but in very low amounts. All pre-flood terrestrial life was destroyed by the flood (Gen 7:21–22), and much was converted into the coal and oil we now recover as "fossil fuels."

When accelerator mass spectrometry techniques are applied to coal and oil, there is nearly always <sup>14</sup>C present, and the standard age determined nearly always seems to be less than 55,000 radiocarbon years.<sup>101</sup> Post-flood mixing of the

<sup>95</sup> Dixon.

<sup>96</sup> Gurnis.

<sup>97</sup> Dixon.

<sup>&</sup>lt;sup>98</sup> Brown, "Compatibility of Biblical Chronology with C-14 Age."

<sup>&</sup>lt;sup>99</sup> Larry Vardiman, *Climates Before and After the Genesis Flood*, (El Cajon, CA: Institute for Creation Research, 2001), 23.

<sup>&</sup>lt;sup>100</sup> Giem, Scientific Theology, 181-183.

<sup>&</sup>lt;sup>101</sup> Ibid., 184; Robert H. Brown, "The Upper Limit of C-14 Age?" Origins 15/1 (1988): 39-43; Robert H. Brown, "C-14 Age Profiles for Ancient Sediments and Peat Bogs," Origins 2/1

atmosphere would create a new steady state level of <sup>14</sup>C in about 1,200 years. If the Septuagint chrono-genealogies are correct, we should see good standard dates for artifacts no further than 4,300 years before present. However, there is an unexplained anomaly in the English Oak and Bristlecone Pine <sup>14</sup>C calibration curves between 450 BC and 765 BC. An exactly dated archeological artifact from 612 BC has now been dated at a calibrated date older than 800 BC. Subsequent statistical analysis of the two curves in this area shows that the probability that they represent the true historical values of <sup>14</sup>C is less than 1 in 10<sup>-14</sup>. <sup>102</sup> This places the entire dendrochronological calibration of <sup>14</sup>C earlier than 450 BC in serious doubt.<sup>103</sup> Three reported older specimens show standard radiocarbon ages for various parts of single animals that vary from 2,700 to 14,000 years.<sup>104</sup> This wide variance in <sup>14</sup>C levels in a single animal is consistent with the flood schema, but not with uniformitarian expectations.

The exponential increase up to a steady state of <sup>14</sup>C after the flood would be expected to result in an exponential decrease in life spans because of the biological effects of <sup>14</sup>C decay. When the life spans of the post-flood patriarchs are plotted against the time after the flood they were born, we find that there is an almost perfect exponential decay of life spans to a steady state 74 years (cf. Ps 90:10).<sup>105</sup>

**Tectonic Activity:** Our model for the flood shows rapid tectonic movement early in the catastrophe, with the continents slowing down as events progressed. This would suggest that events related to tectonic activity should also slow down. Very few major volcanic events are noted today. Such a paucity of eruptions is fully consistent with our model.

Seismometry has been well implemented for about a century, yielding a sufficient volume of data to allow determination of the trend of earthquake

<sup>(1975): 6-18.</sup> 

<sup>&</sup>lt;sup>102</sup> Paul A. L. Giem, "An Anomaly in the Carbon-14 Calibration Curve and its Implications," *Conference on Science and Faith*, Andrews University, (July 28, 1998).

<sup>&</sup>lt;sup>103</sup> Dendrochronology involves the matching of growth rings from one tree to growth rings of another and the construction of a master sequence longer than can be made from single trees. In this process, each step is dependent on the step before it. With the 450-765 BC period calibration clearly in error, any earlier dates based on this erroneous segment are necessarily suspect. We do not believe it too strong to say that no <sup>14</sup>C date earlier than 450 BC can be relied upon to represent the actual calendar age of an artifact.

<sup>&</sup>lt;sup>104</sup> Troy L. Péwé, "Quaternary Stratigraphic Nomenclature in Unglaciated Central Alaska," *Geological Survey Professional Paper 862* (Pittsburgh: U.S. Gov. Printing Office, 1975), 30.

<sup>&</sup>lt;sup>105</sup> Philip M. Holladay, Jonathan M. Watt, "De-generation: An Exponential Decay Curve in Old Testament Genealogies," 52<sup>nd</sup> Annual Meeting of the Evangelical Theological Society, (Nov 16, 2000). The correlation coefficient for the curve fit is 0.9425, indicating an excellent fit, while scatter about the curve attests to the naturalness of the data. In order to fabricate such data, it would have been necessary for Moses to be aware of the underlying mathematical principles. Since the mathematics of the curve were unknown until modern times, we should expect that the data are authentic.

activity.<sup>106</sup> When analyzed, this data shows a steady decrease in earthquakes, as predicted.<sup>107</sup> Of additional interest is the fact that the frequency is oscillating about the mean with a period of about thirty years. When plotted, this looks remarkably like a tracing of uterine contractions in labor, or "birth pangs." (cf. Matt 24:8, Mark 13:8)<sup>108</sup> Unfortunately the detailed data does not extend far enough back to establish the expected exponential decline in earthquakes from the time of the flood to present.

**The Ice Age:** We have already mentioned that the evaporation of ocean water and precipitation of snow at high elevations initially dried up the flood. But this initial drying was not the end of the process. High elevations and polar regions hold immense amounts of ice year-round today, and have held far greater amounts in the past. In particular, during the period just after the flood, virtually the entire area of Canada and large parts of Europe were under hundreds of feet of ice.<sup>109</sup> At this same time, the oceans were hundreds of feet below current levels. Vardiman has shown that the winds that would result from the conditions of the flood would flow in such a pattern as to deposit the bulk of the snow in the locations described for the ice sheets of the Ice Age.<sup>110</sup>

The volume of ice deposited was substantially greater than that required to return the oceans to their previous levels. As mentioned before, the volcanic winter and warm oceans persisted for a number of years, so that the sea level continued to recede for that time. This implies that the end of the flood as observed by Noah was a somewhat incomplete view. Sufficient dry land had appeared to support the re-establishment of ecosystems, but more was yet to appear. The volcanic ash that cooled the earth to promote the precipitation of snow at the poles also rained out on the new land, making it very fertile, as needed for the re-establishment of the world's life.

The winds that deposited the bulk of precipitation at the poles also led to relative dryness in central Europe, the northern Mediterranean, mid-East, and

<sup>109</sup> Dixon.

<sup>&</sup>lt;sup>106</sup> Seismic data is cataloged in the National Earthquake Information Center, the Council of the National Seismic System, and the National Geophysical Data center. These data must be synthesized prior to analysis.

<sup>&</sup>lt;sup>107</sup> Steven A. Austin, "Twentieth-Century Earthquakes: Confronting an Urban Legend," *Vital Articles on Science/Creation*, (Jan 1998).

<sup>&</sup>lt;sup>108</sup> We cannot leave tectonics without a bit of editorial comment on the apparent implausibility to us of the Uniformitarian hypothesis as regards mountain building. This theory states that the upthrust mountains were slowly pushed up over millions of years. Major modern earthquakes result when fault lines slip a foot or two. The destruction from these earthquakes is immense. Each step of upthrust would result in a major earthquake. As one stands looking at a mountain rising many thousands of feet, the number of catastrophic earthquakes this mountain would represent in the Uniformitarian model boggles the mind. This must be then multiplied by the number of upthrust mountains in the world. To the authors, the catastrophic events of the flood appear to be a more rational explanation for the origin of upthrust mountains than the repeated small movements of Uniformitarianism.

<sup>&</sup>lt;sup>110</sup> Vardiman, "Numerical Simulation of Precipitation Induced by Hot Mid-Ocean Ridges."

central Asia.<sup>111</sup> Since the ark came to rest in the center of this region (Gen 8:4), it was ideally located for the restoration and replenishment of life on earth. Vardiman estimates that this airflow pattern and its accompanying Ice Age probably lasted until the time of Abraham.<sup>112</sup> Thus, the land promised by God to Abraham (Gen 12:1) was not the arid land of present-day Palestine, but was instead a lush fertile land which extended many miles into area which is now covered by the Mediterranean Sea. Similarly, when he went into Egypt (Gen 12:10), that country extended many miles to the north.<sup>113</sup>

**Weather:** It hardly seems necessary to comment on the weather. Its chaotic nature is evident to all. Seasonal variations in temperature and the length of days are obvious. The tilted axis of the earth, the absence of a cloud cover, and the new mountainous regions are responsible for all weather on earth. Differential heating results from both axis tilt and direct exposure of land and sea to sunlight. This creates complex airflows that are further complicated by orographic features. The diurnal variation in the temperature at the surface of the earth now ranges from 5.4 to  $41.4^{\circ}$  F.<sup>114</sup> The ozone layer is thin and variable, exactly as would be expected from complex vertical mixing of the atmosphere.

**Gyroscopic Precession:** Our brief review of key evidence cannot end without revisiting the primary disturbance that led to the flood. We have noted that the major surface phenomena are generally consistent with the consequences of gyroscopic precession resulting from the earth's axis being tipped. We must now look to two final pieces of evidence: one below and one above the surface of the earth.

Archeomagnetic data shows that the magnetic field of the earth before the flood was substantially stronger than it is today, reducing the intensity of cosmic rays striking the earth, further decreasing the levels of <sup>14</sup>C below the already low levels resulting from other causes.<sup>115</sup> This level of magnetism fell dramatically at the time of the flood, and its polarity reversed as rapidly as once per week during the year of the flood, as would be expected from a precession-induced spinning motion of the magnetic poles. The magnetic poles continue their motion even today. This movement is generally recognized as being

<sup>&</sup>lt;sup>111</sup> Vardiman, "Out of Whose Womb Came the Ice."

<sup>&</sup>lt;sup>112</sup> Vardiman, "Cooling of the Ocean After the Flood."

<sup>&</sup>lt;sup>113</sup> Ryan and Pitman, 97.

<sup>&</sup>lt;sup>114</sup> "Global Variation of Mean Temperature." (Chicago: Encyclopedia Britannica, 2000 online edition, http://www.britannica.com); Navarra, 120-132. About half of all daily warming is due to direct absorption of solar radiation by the surface. This is enhanced by high elevation (less atmosphere to transit), long distance from oceans (less moderation by air movement from areas of stable temperature), and absence of clouds (more surface exposure to solar heating). At night these same factors operate in reverse, enhancing heat loss by direct radiation to space. Thus, areas with these features will have the greatest diurnal temperature variation.

<sup>&</sup>lt;sup>115</sup> Russell Humphreys, "The Mystery of the Earth's Magnetic Field," *Vital Articles on Science/Creation* (Feb 1989).

precession, as predicted by our model.<sup>116</sup> The rapid initial movement followed by a slowing pattern is also what would be expected from precession in a fluid medium. New research has identified evidence that the inner parts of the earth are moving at a different rate than the crust. This true polar wander is contemporaneous with the appearance of the Cambrian fossil layer, which many creationists identify as the first layer of flood-borne sediments.<sup>117</sup>

The final item of evidence comes from the skies. Since the earth itself was the gyroscope that was made to precess, we should be able to see that precession in astronomical measurements. The earth's axis wobbles slightly between  $22^{\circ}$  and  $24^{\circ}$ . This should not be surprising, since a tilted gyroscope not only precesses, but tries to right itself. But more important is the fact that the equinoxes precess. The period of this precession is about 20,000 years, while the axis tilts just half as fast, with a period of 40,000 years.<sup>118</sup> Again we find evidence consistent with an axis shift.

#### Discussion

We have considered a variety of evidence in our quest for a paradigm explaining the physical events of the flood. The biblical data regarding Eden suggests to us a paradise that was completely climate controlled by a high altitude cloud cover, with no significant surface weather. It had little or no high ground of substance. A single continent was located around the equator of a world whose axis of rotation is normal to the plane of the ecliptic.

Because of man's sin, God destroyed that earth with a flood by tipping the axis of rotation of the earth. Gyroscopic precession spun the magnetic poles of the earth wildly. The surface of the earth was dramatically fractured, and the aquifer which supplied the river of Eden was split open to provide the water for the flood. The entire earth became covered with water.

Oceans of water were evaporated by contact with the exposed hot mantle of the earth. Subduction led to massive volcanism. Sliding continents thrust up high mountains where precipitation fell as snow to begin the drying up of the floodwaters. Volcanic ash in the stratosphere cooled the earth to accelerate the process. Oceans of floodwater were deposited as snow and ice to create the Ice Age. A great wind created by convection led to depositing snow where great ice sheets were eventually located. It also led to favorable conditions for the reestablishment of life in the area where the ark landed. Volcanic ash raining out from the stratosphere fertilized the earth to help with re-growth of vegetation.

<sup>&</sup>lt;sup>116</sup> Ibid.; Robert H. Brown, "Reversal of Earth's Magnetic Field," Origin, 16/2 (1989): 81-84.

<sup>&</sup>lt;sup>117</sup> Joseph L. Kirschvink, Robert L. Ripperdan, David A. Evans, "Evidence for a Large-Scale Reorganization of Early Cambrian Continental Masses by Inertial Interchange True Polar Wander," *Science* 277 (July 26, 1997): 541-545; Vardiman, "The Sands of Time."

<sup>&</sup>lt;sup>118</sup> Larry Vardiman, "A Faulty Climate Trigger," *Vital Articles on Science/Creation* (Mar 1995).

The drying up of the flood did not end for many years. The atmosphere continued to be cooled due to extensive amounts of volcanic ash in the stratosphere, but the oceans did not cool immediately. This led to continuing transfer of ocean water to polar ice caps. About the time of Abraham, this process finally ended, and the Ice Age began to melt. By then, men dispersed at Babel had traveled to the farthest parts of the world, and animals had repopulated everywhere.

As the ice caps melted, ocean levels rose, leading to the geography with which we are familiar. The land connections to the Americas and Australia flooded, leaving those areas isolated from the Eurasian landmass. If this process continues unimpeded, it is likely that all low elevation polar ice will eventually melt, raising the world's oceans above their current levels.

**Remaining Difficulties:** A number of problems need to be addressed. Further simulations need to be done on problems ranging from the motion of continents to the dissipation of the ocean floor heat and the exact nature of the cloud cover of the antediluvian earth. The dendrochronological <sup>14</sup>C calibration curves need to be redone. We could extend this list *ad infinitum*. The discovery of solutions will be exceeded only by the appreciation of new problems.

Some might suggest that we must wait until all problems are solved to propose this paradigm. Instead, in accordance with Brand, we hope that this paradigm leads to testing by experimentation and observation.<sup>119</sup> It would be satisfying to be able to show that the physical data demand the conclusion that the biblical account is correct. However, the progress of science has always been that of skepticism, revision, and innovation. Regardless of the status of our knowledge at any point in time, these forces will move forward. Thus, every scientific conclusion will remain tentative until the only eyewitness to all these events makes Himself known to all.

A Bit of Theological Speculation: At this point, we would like to leave the world of hard science to tread lightly on apocalyptic theology. God destroyed the original earth with a flood. In it, every part of the surface of the earth was moved out of its place. The sixth seal of Revelation (Rev 6:12-17, cf. Matt 24:29) describes every mountain and island of the sea being moved out of its place. The wicked cry out for the rocks to fall on them to protect them from the wrath of God. This is an uncanny parallel to the events of flood, and only events of that degree can truly fully fulfill the imagery of the prophecy. Could it be that at the Second Coming God will tip the earth back upright in preparation for its re-creation into a paradise for mankind?

**Comment:** We have investigated the possibility that, contra Gould, the Bible is in fact a book that describes physical reality. We have found that while not designed as a textbook of science, the Bible contains sufficient physical statements to allow us to infer fairly detailed scientific information. That

<sup>&</sup>lt;sup>119</sup> Brand, 56.

information, when tested against the physical evidence, has been found to in general conformity with that evidence. Should we expect any less when the author of the book is also the author of the universe?

Apart from Christ we are still incapable of rightly interpreting the language of nature....

God has permitted a flood of light to be poured upon the world in the discoveries of science and art; but when professedly scientific men reason upon these subjects from a merely human point of view, they are sure to err. The greatest minds, if not guided by the word of God, become bewildered in their attempts to investigate the relations of science and revelation. The Creator and His works are beyond their comprehension; and because these cannot be explained by natural laws, Bible history is pronounced unreliable.

Those who question the reliability of the Scripture records have let go their anchor and are left to beat about upon the rocks of infidelity. When they find themselves incapable of measuring the Creator and His works by their own imperfect knowledge of science, they question the existence of God and attribute infinite power to nature.

In true science there can be nothing contrary to the teaching of the word of God, for both have the same Author. A correct understanding of both will always prove them to be in harmony. Truth, whether in nature or in revelation, is harmonious with itself in all its manifestations. But the mind not enlightened by God's Spirit will ever be in darkness in regard to His power. This is why human ideas in regard to science so often contradict the teaching of God's word.<sup>120</sup>

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<sup>&</sup>lt;sup>120</sup> Ellen G. White, *Testimonies for the Church*, 8:257-258 (Washington, D.C.: Review and Herald, 1904).

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# Genesis 1 as Vision: What Are the Implications?

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Conservative scholars do not agree on the source from which Moses received the information found in Genesis 1:1–2:3.<sup>1</sup> Many believe the creation narrative was part of an ancient oral tradition. Some believe it was passed down in writing.<sup>2</sup> Other scholars believe the story was revealed to Moses in some way. The Bible, of course, while telling us the narrative is inspired and so a trustworthy source of teaching (1 Tim 3:16), does not tell us how it was received. If it was in fact revealed, however, then it may have been revealed in words, but also it may have been revealed in a vision. If it was revealed in a vision, then there are aspects of other visions that may help us reconstruct what Moses might have seen. Such a reconstruction, though necessarily speculative, sheds light on certain exegetical questions.

In Numbers 12:8 God tells Aaron and Miriam He talks with Moses "face to face." In the vision of Daniel 11–12 the information given the prophet is highly symbolic, but entirely oral. Daniel sees the angel who speaks to him, but he does not see the future—he hears it. That doesn't necessarily mean, of course, that

<sup>&</sup>lt;sup>1</sup> I am assuming the veracity of the ancient tradition that calls the first five books of the Bible "The Books of Moses." In Mark 12:26 Jesus refers to "the book of Moses," though He is alluding to a story in Exodus (see also 2 Chron 25:4; 35:12; Ezra 6:18; Neh 13:1).

<sup>&</sup>lt;sup>2</sup> See R. K. Harrison, *Introduction to the Old Testament* (Grand Rapids: Eerdmans, 1969), 547–553, who suggests that Moses may have had access to Genesis stories preserved on clay tablets. In an upcoming book William H. Shea speculates that the stories were inscribed in an early version of the alphabetic Proto-Sinaitic long before the time of Moses. Certainly Moses could have known and used this script, and the fact that W. F. Albright dated the earliest accepted inscriptions to the 15<sup>th</sup> century B.C. does not mean it was never written before that. Indeed, it seems unlikely that this elegant alphabet was created at that time by slaves in a Sinai turquoise mine. However, in this paper I will consider another possibility.

God dictated the creation story to Moses or that He only communicated in words. In Genesis 15 God reveals Himself to Abraham both in words and in visual symbols. The vision of Daniel 2 is entirely silent, while the vision in the first half of Daniel 7 is apparently silent except for the boasting of the little horn. In Revelation, everything imparted to John in chapter 12 is seen and apparently not heard at all, except for vs. 10–12, which are specifically heard as a commentary on what John is seeing.<sup>3</sup> Genesis 1 seems to be primarily visual, except for the voice of God.

I would suggest that the vision of Revelation 12 might be conceived as a brief, simple animated film with only a few scenes (a shot of the woman, a shot of the dragon, a shot of the woman in labor with the dragon waiting at her feet, a shot of the child being lifted up to heaven, etc.). I don't think John necessarily saw a real woman or dragon. The vision of Genesis 1, on the other hand, if it is in fact based on a vision, is most helpfully seen as cinematography, rather than animation, with Moses seeing real things, but with the time scale shortened from days to minutes by editing. The vision might have used such standard cinematic techniques as establishing shots, long shots, medium shots, close-ups, cuts, fades to black, sound effects, voice-overs, and time-lapse photography. We would be mistaken to think Moses saw the creation in real time, a vision actually a week long, like some Andy Warhol experimental movie. Rather, the entire vision may have taken at most an hour. Among visions, Genesis 1 is also unusual in looking at the past, rather than the immediate or distant future. (Similar examples might include Gen 2–3, less possibly the flood narrative, and perhaps aspects of Isa 14 and Ezek 28.)

A feature of most prophecy is symbolism and a heightened, often poetic use of such figures of speech as metaphor, synecdoche, and hyperbole to reveal a literal truth. To see, say, the various beasts of Daniel and Revelation as literal rather than symbolic would lead to serious misinterpretation. Many scholars have suggested symbolic or poetic meanings in Gen 1 lending themselves to a mythic interpretation of the narrative, but while there is some poetic language in Gen 1, it is no more poetry than Charles Dickens' poetic prose or the measured tread of the Declaration of Independence are poetry.<sup>4</sup> A cinematic reading of the

<sup>&</sup>lt;sup>3</sup> See William H. Shea & Ed Christian, "The Chiastic Structure of Rev 12:1–15:4: The Great Controversy Vision," *AUSS* 38:2 (Autumn 2000), where I write, "Except for Rev 12:10–12, introduced by the words 'And I heard,' the entire Dragons' War Chiasm seems to be silent . . . It should be imagined as a series of brief animations, rather than as an extended vision of actual events. John is describing what he is shown, rather than summarizing the war. The summarizing has already been done for him, so he knows what is important and must be included. Vv. 10–12 could be seen as a vocal commentary on the events seen in vv. 9–10, a sort of 'voice over,' to use the cinematic term."

<sup>&</sup>lt;sup>4</sup> As John Sailhamer writes in *Genesis Unbound* (Sisters, OR: Multnomah, 1996), "[T]he author clearly intends us to read his account of creation as literal history. He does not expect to be understood as writing mythology or poetry. His account, as he understands it, is a historical account of creation" (45). "Although many have interpreted the creation account as if it were poetic, there are no signs that these texts were intended to be read as such. To be sure, the texts are written in a

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story also seems to downplay the mythic even as it reveals the scenic editing of the vision.<sup>5</sup>

#### In the Beginning

We turn now to the text. On day one God is said to have commanded the appearance of light. The text does not say that on that day God created the seas or the earth or the universe. When were they created? "In the beginning," whenever that might have been. They did not merely happen. They were created, by God, at some time before the creation week described in the rest of Gen. 1. Genesis 1:1 reveals an ancient creation of the universe, including the sun and the wet rock we call earth, "in the beginning,"  $b^e re^2 \hat{s}t$ , an indeterminate time before God created life here.<sup>6</sup> The phrase, however, is a statement by Moses, not by  ${}^{s}l\bar{o}h\hat{m}$ . There is no scenic content to the verse, no description of this creation of the heavens. That is to say, Moses does not seem to have seen the universe being created. He simply states that it was created. It was there, heavens and earth, *haššāmayim w*<sup>e</sup> $i\bar{e}t h\bar{a}i\bar{a}res$ , when the vision began with water and darkness.<sup>7</sup>

structured, balanced, narrative style, and repetition is frequently used. But in themselves, such features do not indicate the presence of poetry" (227; see also 227–230). This book is full of insight into the word usage in Genesis 1, though I do not accept Sailhamer's belief that there was life on earth before creation week.

<sup>&</sup>lt;sup>5</sup> Sailhamer writes, again, "The use of 'myth' to explain the biblical creation narratives, however, has run into serious trouble. For one thing, the biblical texts do not look like myths. Ancient myths were, as far as we know, always poetic. Poetry was a defining characteristic of ancient mythology. . . . Judging from what we know about ancient creation myths, the biblical texts give every impression of having been written and understood as realistic depictions of actual events" (*Genesis Unbound*, 230). "Most biblical scholars agree that there is little basis for assuming the biblical writer used or had access to any known ancient Near Eastern creation myth" [80; in a note he cites John H. Walton, *Ancient Israelite Literature in Its Cultural Context* (Grand Rapids: Zondervan, 1989), 34–38; see also n. 25 of this paper]. Some might argue that this cinematic approach could be used to argue that there might be millions of years between each scene called a "day." It is true that it is Moses who perceives that literal days are passing. God Himself does not say so in the vision, but He does choose this order and the darkness/light pattern recognized as "days." As we will see, the vision makes most sense when seen as a series of closely related events following in a logical sequence. If the vision is meant to reveal aeons symbolized as days, why devote one day to light or the "lights"? Did they take millions of years to develop?

<sup>&</sup>lt;sup>6</sup> Sailhamer writes that *re'šît* is the usual Hebrew word for a "beginning" of unspecified duration, as in the beginning of a king's reign. If Moses had meant to indicate that this marked the "start" or "initial point" of the universe or this planet or solar system, he could have used the words *rišôniy* or *t'hillāh* (*Genesis Unbound*, 40–41).

<sup>&</sup>lt;sup>7</sup> I agree with Sailhamer that the focus of Genesis 1 is "the land," pointing toward "the promised land," not "the earth" as globe or even as all dry land on the globe. He explains that the phrase "the heavens and the earth" in v. 1, however, is a merism, an idiomatic expression in which polar opposites, combined, stand for an entirety. There was no Hebrew word for "universe," and the conception of the universe Moses would have had would have been much different from our own. "The heavens and the earth," however, was the expression used to refer to the totality of what God had made before creation week (*Genesis Unbound*, 55–57). The phrase "the heavens and the earth, the sea, and all that in them is" is not a merism, however, but a list of what God made during creation

This creation does not seem to have been, thus, part of the movie, part of the vision. Some have seen the verse as a title or summary, but Sailhamer has shown conclusively that it is not.<sup>8</sup> It seems, rather, to be Moses' inspired deduction, based on v. 2, of an ancient universal creation.<sup>9</sup> He saw that it existed, therefore God must have made it.<sup>10</sup> This is not only a deduction, of course, but a statement of faith, to be accepted by faith.

It may be, of course, that God gave Moses a very quick view of that creation. Perhaps the movie began with an establishing shot, from space. Perhaps God revealed to Moses in a few minutes, using a sort of time-lapse technique, a universal creation that took aeons as God shepherded stardust, rolled it into balls, and set it afire. Then perhaps God revealed this world, swathed in dense clouds, black beneath yet glowing from above (Job 38:8–9). It may be that Moses was so unbalanced by these sights seen from such an unaccustomed point of view that rather than describe them, he simply wrote, "In the beginning God created the heavens and the earth." Better perhaps to leave it at that. Who would believe him?

What if the movie begins in v. 2, however? Moses tells us the earth (or, better, "the land"), as it appeared before God began this work of creation week, was unformed and unfilled— $t\bar{o}h\hat{u} \ w\bar{a}\underline{b}\bar{o}h\hat{u}$ —covered with water, and dark.<sup>11</sup> If

week. "Exodus 20:11 does not say God *created* 'the heavens and earth' in six days; it says God *made* three things in six days—the sky, the land, and the seas—and then filled them during that same period" (106).

<sup>&</sup>lt;sup>8</sup> "1. In the original the first verse is a complete sentence that makes a statement, but titles are not formed that way in Hebrew. . . . 2. The conjunction 'and' at the beginning of the second verse makes it highly unlikely that 1:1 is a title. . . . 3. Genesis 1 has a summary title at its conclusion [2:4], making it unlikely it would have another at its beginning" (*Genesis Unbound*, 102–103).

<sup>&</sup>lt;sup>9</sup> I am not suggesting a prior creation of life on earth, as speculated by Sailhamer in *Genesis Unbound* and by John B. Wong in *The Resurrected Body—Y2K and Beyond* (Lanham, MD: University P of America, 2000), 319–321.

<sup>&</sup>lt;sup>10</sup> Gregory A. Boyd writes, in *God At War: The Bible & Spiritual Conflict* (Downers Grove, IL: InterVarsity, 1997), "[I]t is significant that the author does not say that God created the darkness, the deep or the waters. This does not necessarily imply that the author thought of these as eternal realities, only that it did not suit his purposes in composing this account to state this at this point (320, n. 34).

<sup>&</sup>lt;sup>11</sup> I owe the "unformed and unfilled" translation to Richard Davidson (private conversation). There is a long tradition of seeing  $t\bar{o}h\hat{u}$  wāboh uaboh as a description of chaos. This fits in neatly with the ANE picture of Tiamat the chaos monster or goddess being destroyed or conquered. It also fits in with the Greek world view already seen in the LXX translation. However, in his commentary on Genesis for *The Expositor's Bible Commentary* (Grand Rapids: Zondervan, 1990), Sailhamer quotes Isaiah 45:18 as evidence of the meaning of  $t\bar{o}h\hat{u}$ . "[God] did not create it [the land] to be empty [ $t\bar{o}h\hat{u}$ ], but formed it to be inhabited" (2:24). This suggests that bringing forth what was inhabitable from what had been empty was closely allied to goodness in God's eyes. Similarly, being fruitful, multiplying, filling the now inhabitable earth was good. I believe Moses was saying *the land* (with all the connotations the word would have had to his first listeners) was  $t\bar{o}h\hat{u}$  wāboh û. It was unformed not because it was chaotic, but because it was still under water, and so without the form it would soon have. It was unfilled because it was not yet habitable.

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this were revealed to him in a vision, what would he have seen? He would have seen nothing! If he first saw the earth from the outside, in what is called an establishing shot, perhaps he was carried down into the darkness, as if in a space capsule, down and down until he splashed into warm water. What would the movie look like then? A black screen with the muted sound of the sea in a fog far from land!<sup>12</sup> Would Moses, in vision, have felt himself to be *in* the water? Perhaps. Perhaps this scene gave Moses the feeling of flailing amid dark waves, not knowing where he was or what was going on. After all, he didn't buy a ticket to this movie, and it doesn't seem to have come with a title or credits or subtitles, unless we see Gen. 2:4 as the title.

Perhaps instead he felt himself to be again in a little ark like the one he rode on the Nile in his infancy, a sort of coracle, basket-like and bobbing like a cork. He heard waves splashing the sides, trailed his hands in the water. He couldn't see the water, but he knew it was there. What's more, it was the only time in his life he'd been unable to see land.

Apparently God didn't tell Moses in the vision that water covered the face of the earth. Moses does not report that God said that. Moses does not seem to have searched the world for signs of land. How did he know there was water everywhere? On the third day in the vision God commanded the dry land to appear, so perhaps Moses as writer deduced that in the time of darkness and water all land was submarine. However, if Sailhamer is correct in reading  $h\bar{a}^2\bar{a}res$  as "the land," and I think he is, then Moses was not in any case describing the face of the entire earth, but only stating that "the face of the land" he would see on the third day was still underwater. He was not making a deduction regarding the entire earth on the basis of what he could see in his vision, but merely explaining that he couldn't yet see the land he saw a few minutes later, in the representation of the third day.<sup>13</sup>

How did Moses know God's Spirit was hovering over the water? Did it glow in the darkness like some bioluminescent jellyfish? Did Moses sense the Spirit's presence? God seems not to have told him, for he does not report hearing God speak at this time. Was this Spirit the equivalent of the voice of God Moses was about to hear without any physical manifestation? Did Moses,

<sup>&</sup>lt;sup>12</sup> Cf. Job 38:8–9, "Or who shut up the sea with doors, when it brake forth, as if it had issued out of the womb? When I made the cloud the garment thereof, and thick darkness a swaddlingband for it." Job 38 is of course poetry and uses extravagant imagery, not to be taken literally, but we find still the suggestion that the darkness was due to dense cloud cover, not to their being no light in the universe.

<sup>&</sup>lt;sup>13</sup> Even given his education as a prince of Egypt, for Moses the land given to Abraham would have taken up most of his conception of the world. It included everything north of Egypt (or perhaps north of the Nile—though literally the Nile is south east, not due south), south of Assyria (on the Tigris) and Babylon (on the Euphrates), east of the Great Sea, and west of Ur (on the Euphrates). Beyond those "border" countries were barely known barbarian lands. "The land" was the heart, the center, the region between the seas and between the great powers of his time, though it also included much of the land claimed by those powers.

working back from the voice he heard next, speculate that God's Spirit must have been hovering over the water, because he heard a voice but saw no one? Perhaps.<sup>14</sup> As the Hebrew word for Spirit,  $r\hat{u}^a h$ , also means "breath," it may be that Moses saw the dense, dark vapor covering the water in poetic terms as the breath of God.<sup>15</sup>

#### Forming the Creation

In that liquid darkness Moses heard a voice he recognized, the voice of God.<sup>16</sup> It spoke the first words heard in this vision, "Let there be light." Moses reports the result: "and there was light." Did it come on like a lightbulb? Probably not. If we see this vision as a movie, then we needn't imagine the first day in the vision as taking more than a few minutes. In the vision, after the voice spoke, there seemed at first to be no response. Then slowly, almost imperceptibly, as the seconds passed, like the creeping of the earliest dawn, Moses realized that he could just barely make out his hand in front of his face. The light increased until he seemed to be in a cloud. But all he could see was cloud, water, and his hands. Perhaps he heard the disembodied voice of God say "Day." Then it said, "*Tob*," "Good." Then gradually the light faded, and the voice said, "Night." As best we can judge from his report, that is all Moses heard and saw. The scene faded to black. As he later wrote out what he'd seen, he wrote, "It was evening and morning: one day."<sup>17</sup> Moses did not necessarily mean evening

<sup>&</sup>lt;sup>14</sup> Boyd writes (85), "Hence the 'deep' that in *Enuma Elish* was represented as the evil Tiamat is here simply water. Far from battling it, Yahweh's 'Spirit' (or 'breath' or 'wind') simply 'sweeps' or 'hovers' over it (1:2). So too, the stars, moon and sun, which Babylonian and Canaanite literature viewed as enslaved rebel gods, are here simply things that Yahweh has created (1:14–19)."

<sup>&</sup>lt;sup>15</sup> It is interesting to look at how "the deep,"  $t^{c}h\partial m$ , is used in Ezek 31, which presents an extended metaphor of Assyria as a "cedar in Lebanon" and makes frequent reference to "Sheol" and "the pit." (We might recall that Ezek 28, ostensibly dealing with the King of Tyre—also in Lebanon—has often been thought to contain a coded description of the fall of Satan.) Genesis 1:2 refers to "waters" and "the deep." Ezekiel 31: 4 reads, "The waters make him great, the deep set him up on high . . ." Verse 15 reads, "Thus saith the Lord GOD: In the day when he went down to the grave I caused a mourning: I covered the deep for him, and I restrained the floods thereof, and the great waters were stayed." The LXX, of course, translates  $t^{e}h\partial m$  as *abussos*, the same word used in Rev 20 to represent the place where Satan will be chained during the millennium. Is it possible that the Spirit of God was hovering over the waters, over the deep, in order to hold back Satan, restrain him in the abyss, while God created Eden and placed a garden in it? Was God, through the creation of the land and the garden and the man made in His image, establishing an earthly beachhead in the cosmic conflict from which Adam, as His champion, could do single-handed battle against the dragon and his angels, cast from heaven, with the earth and all mankind at stake?

<sup>&</sup>lt;sup>16</sup> There is of course no textual reason to assume Moses wrote Genesis before the Exodus, though he certainly would have known the stories of Abraham, Isaac, and Jacob, or God wouldn't have identified Himself as their God in Exod 3:6.

<sup>&</sup>lt;sup>17</sup> Translation by John H. Sailhamer in *The Pentateuch as Narrative* (Grand Rapids: Zondervan, 1992), 89. E. A. Speiser writes, in his Anchor Bible commentary *Genesis* (Garden City, NJ: Doubleday, 1964), "In Semitic (notably, in Akkadian, cf. Gilg., Tablet XI, lines 215 ff.) the normal ordinal series is 'one, second, third,' etc., not 'first, second, third,' etc." (6; emphasis in original). In

came before morning, though the Israelites later understood it that way. More likely, he was defining day as a complete cycle of light and darkness, without meaning to imply which came first. If the evening came first on the first day, then God's command "Let there be light" might have been followed by twelve hours of darkness!<sup>18</sup>

From our cinematic experience we know that in a scene in a movie, a few lines of dialogue may represent a long conversation. Likewise, in a vision a few representative words may serve more as symbols than as actual words used. If Moses saw in vision a severely shortened version of the real-time creation week, carefully edited so the words used would be few in number and easily memorable, then we should understand that during that week God may well have done a lot more talking than is reported. For all we know the angels of heaven may have gathered around to comment on and praise each creative act. But that is not in the movie, so if it happened that way, we don't know. What does seem clear is that the editing emphasized that Moses was not meant to see the creation as happening over aeons, but in twenty-four hour days.<sup>19</sup>

Some have argued that the sun was created on the fourth day, so the light Moses saw on the first day must have been the light of God. If this were so, however, then does the light of God's presence go out at night? Also, if this were so, then actually the fourth day was the first day, as day is defined as evening and morning, which are dependent on the sun and the rotation of the earth. If we see Moses' vision in cinematic terms, with him merely describing what he sees from his viewpoint, then we can deduce that God's command for light to appear was fulfilled by God's gradually raising the dark, dense clouds that covered the earth's waters. On the second day this would leave a gap between ocean and clouds which Moses could see, but on the first day the only visible result was a diffuse light which came from the sun, even though that sun would not be visible for several days.<sup>20</sup>

the Old Testament, when such numbers are applied to days, they always point to literal, twenty-four hour days, not to prophetic days or symbolic days.

<sup>&</sup>lt;sup>18</sup> Then again, Moses may have seen the blackness before God's first words as night, thus establishing a night/day pattern. In that case, perhaps God gave most of His commands in the darkness, and His words were obeyed before each day's dawn. In that case, Moses would have seen not the creating but what had just been created, works at least begun, even if not yet complete.

<sup>&</sup>lt;sup>19</sup> Sailhamer, *Expositor's* (26): "The division between 'the day' and 'the night' in v. 4 also leaves little room for an interpretation of the 'light' in v. 3 as other than that of the light from the sun." It is true that in a movie a fade to black needn't indicate the passage of a day, but from the fourth day on, Moses would have been able to observe the passage of sun and moon through the sky, which strongly supports the twenty-four hour day scenario.

<sup>&</sup>lt;sup>20</sup> Ibid.: "It should be noted, however, that the sun, moon, and stars are all to be included in the usual meaning of the phrase 'heavens and the earth' ( $ha\check{s}\check{s}\bar{a}mayim w^{\circ}\bar{e}t h\bar{a}^{\circ}\bar{a}res$ ), and thus according to the present account these celestial bodies were all created in v. 1. Verse 3 then does not describe the creation of the sun but the appearance of the sun through the darkness, . . ."

In Moses' vision the darkness lifted at the dawn of the second day, and again he saw the water close around him and the fog. Again he heard God's voice: "Let there be a firmament in the midst of the waters, and let it divide the waters from the waters." In fast motion, as Moses watched, the fog rose in a few minutes higher and higher. As it was revealed he heard God say " $\check{S}\bar{a}mayim$ ," "sky" or "heavens." Now, as far as Moses could see around him, he saw nothing but water. Above him was an expanding bowl of unbroken cloud, growing steadily brighter, and within that an expanse of clear sky. (The Hebrew word used,  $r\bar{a}q\tilde{t}^{a_{c}}$ , suggests an inverted bowl of hammered metal.) The sky and cloud darkened, and again the scene faded to black. The second day was past.

In Moses' day the earth was seen as flat. God, not wanting to reveal what was beyond the imagination of Moses and those around him and so foster skepticism, showed him nothing that might disabuse him of this notion. On the other hand, nothing in the vision necessarily reinforced the idea of a flat earth. When God reveals truth to His servants the prophets, He needn't reveal to them the entire truth. Truth is sometimes progressive, revealed as we are ready to receive it.

In Moses' vision, the darkness faded, and again he saw water, sky, and high overcast. Again he heard God's voice: "Let the waters under the heaven be gathered together unto one place, and let the dry land appear." (The Hebrew word for "dry land" here,  $yabb\bar{a}\check{s}\hat{a}$ , is not the usual word for "land" in the chapter,  $h\bar{a}\check{a}res$ , but is a word sometimes used when what has been underwater—under, say, a river or sea—is made relatively dry.)<sup>21</sup> This verse deserves a careful reading. God did not say, "Let there be oceans and let there be dry continents." We've merely assumed that on the basis of our own geographical knowledge. Clearly oceans were already present in v. 2. He did not say, "Let dry land rise up out of the oceans and form mountains." He commanded that the waters under the sky be gathered together into one place. While in fact the land must have been rising above the water level, according to the text it appeared because the waters were "gathered together unto one place," thus exposing the land.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> For example, the drying of the earth after the flood (Gen 8:7, 14), the Red Sea during the Exodus (Josh 2:10, Nah 1:4), and the Jordan during the Exodus (Josh 4:23; 5:1). See R. K. Harrison, *New International Dictionary of Old Testament Theology & Exegesis* (Grand Rapids, Zondervan, 1997), 2:393–394.

<sup>&</sup>lt;sup>22</sup> Boyd says that the biblical conception was that the foundations of the earth rested atop the waters below the earth (84), but the texts he cites to support this are not convincing. In Ps 104:5–6, we read, "Who laid the foundations of the earth, that it should not be removed for ever. Thou coveredst it with the deep as with a garment: the waters stood above the mountains." This is, again, highly metaphorical poetry, but the suggestion is that earth was the foundations, with "the land" covered with a relatively thin "garment" of water. Waters "under the earth" may refer to underground aquifers and springs, but then again it may refer merely to the simple observation that the oceans and seas always seem to be below the level of the land adjacent to them. (Moses probably had no conception of a lake, such as Lake Titicaca in Peru, nestled among mountain peaks far above sea level.)

We should not imagine that God is referring here to the oceans, or even to the Mediterranean Sea. A more literal translation of the Hebrew might be "let the waters be pooled into one pool." The Hebrew word *miqweh* means a pool or reservoir.<sup>23</sup> It is also the word for the ceremonial bath used for cleansing or baptism. As Moses watched, what happened literally in hours, he saw in minutes. As the land rose, the water on it flowed toward one central pool. Given the words used, Moses probably saw the entire circumference of a large lake surrounded by dry land. Muddy, sandy land rose up from the sea like a whale rising to the surface, while the water that had been covering the land all seemed to flow toward this lake. The text suggests that he did not see it rise very high. Nothing in the text leads us to think he saw the formation of mountains.<sup>24</sup>

Perhaps Moses heard God say, "It shall be called land" and "It shall be called seas." Or perhaps he heard the words "land,"  $h\bar{a}$ <sup>3</sup> $\bar{a}res$ , and "seas,"  $y\bar{a}m$ , and as in this vision God spoke in a language Moses understood, Moses knew at once what God was talking about. God didn't have to say, "This wet stuff is the sea." The Hebrew word  $h\bar{a}$ <sup>3</sup> $\bar{a}res$  is the same word used in referring to "the land the Lord thy God" gave to the Israelites. The vision does not tell us Moses saw all the lands of the earth. He saw "the land." Sailhamer argues that Moses would have identified this land with the land promised to Abraham.<sup>25</sup> The word  $y\bar{a}m$  is the same word used in referring to the "Sea of Kinnereth," or Galilee, in Num 34:11; to the "Salt Sea" or Dead Sea in Num 34:12; and to the bronze "Sea" or laver outside Solomon's temple in 1 Kgs 7:23.

This does not mean, of course, that there were no oceans on the planet. Moses saw dry land completely enclosing a sea or lake. What he saw and what he described was limited by what his vision revealed.<sup>26</sup> If Genesis 1 is in fact

<sup>&</sup>lt;sup>23</sup> See Cleon L. Rogers, Jr., NIDOTTE, 3:896–897.

<sup>&</sup>lt;sup>24</sup> In their article "A Scientific Paradigm for the Genesis Flood" [*JATS*, 12/1 (Spring 2001): 107], Ted and Ken Noel suggest it is unlikely that any mountain before the flood, especially in the area of "the land" of Eden, was 2,000 feet or more high, as this would have caused weather patterns leading to rain, contradicting Gen 2:5. Also, they explain, such an elevation could well lead to uncomfortably cool nights, and it would affect the dew point. Their arguments are too complex to be explained here, but worth reading.

<sup>&</sup>lt;sup>25</sup> Genesis Unbound, 50–54.

<sup>&</sup>lt;sup>26</sup> And what his vision revealed was limited by his viewpoint, the height from which he saw this event. What might he have seen? We can estimate. According to the *Encyclopaedia Britannica* (on-line article on "Horizon"), if Moses' point of view was five feet above flat land, his horizon would have been only 2.8 miles, which means the "sea" would have been a mere pond. If he saw the scene from a low hill, he would have seen a bit farther. If he found himself on a peak 2,000 feet above an otherwise flat land, he would have been able to see only about 25 miles, due to the earth's curvature. Even if he saw the scene from 10,000 feet in the air, however, about the height of Mt. Hermon in Israel, he could have been only 126 miles, at most. This may help us imagine what he might have seen and what he would have been unable to see. Of course, at that elevation, he would not have seen the details of the creation of vegetation and animals, and it is very unlikely that God made mountains of that height on that day. (The usefulness of cinematic techniques such as using zoom or telephoto lenses in vision is again evident.) It seems more likely that at most, if he were on

based on a vision, then the "sea" and the "land" may have symbolized all seas and lands. But there is a more important meaning to what he was shown.

When God commanded that light appear, He pronounced it "good" because it was good for the plants and animals and people He was about to create. The "waters" Moses also called  $t^e h \hat{o} m$ , the deep, and because they were uninhabitable and dangerous, they were not "good." Even on the second day, when God separated the waters above from the waters below, those waters below were still uninhabitable, so He did not call them good. Only on the second day among the first six was nothing called good. After God "gathered" the waters into one place on the third day and named them "seas," however, they became a safe place for created life, inhabitable, so He called them good. They had been defined, circumscribed, pacified. Perhaps Moses saw them as being relatively shallow and free of waves.<sup>27</sup>

This goodness formula is repeated several more times. How did Moses know, from his vision, that God saw that these things were good? Was he given a sort of spiritual entrance into the mind of God and simply knew God's thoughts? More likely, he discovered God's thoughts when God said, "It is good," even though in the text God is not reported to have spoken these words, or perhaps he deduced God's satisfaction with His creation from the fact that God proceeded to the next day's work.

Now, the land having appeared before the eyes of Moses, God spoke again: "Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself." In Moses' vision, did he then see these things suddenly appear, full grown, or did he see the growing as vegetation hastened to obey? Imagine this wonderful scene as the ultimate example of timelapse photography. You've seen such photography, in which cinematographers, by shooting one frame a minute over several weeks, show a plant growing to maturity in seconds. Imagine the land before Moses' eyes sprouting in a similar fashion, first grasses and flowers, then saplings forced into years of cell development in a matter of hours, though within the vision it was merely minutes, then fruit appearing and ripening in seconds. It would have been a green paradise such as Moses, the dweller in Egypt and Midian, had never even imagined. The slight rising of the land coinciding with the gathering of the waters into one place Moses would have probably seen in a cinematic long shot. As the grasses

a hill in his vision, Moses might have seen perhaps ten or twenty miles in any direction. We might fairly imagine him seeing a sea the size of the Sea of Galilee.

<sup>&</sup>lt;sup>27</sup> The ancient evidence, throughout Bible times, is virtually unanimous that deep oceans were considered terrifying and dangerous, not good. There is no mention of rivers in Gen 1 and no mention of this sea in Gen 2. Perhaps we should see this "gathered" sea as being fed by a mammoth spring of fresh water, such as one finds flowing from the end of a major aquifer in northern Florida into a lake, and that it is from this sea or lake that the four rivers flow, rather as the Nile flows from a lake. The word for river used in Gen 2:10,  $n\bar{a}h\bar{a}r$ , is used in Job 28:11 for an underground source of a river.

and trees appeared, perhaps the vision zoomed in on various wonders, backed up as trees grew, dollied through the new-sprung meadows. Some scholars have suggested that if the text is taken literally, Moses saw only plants yielding food edible by humans.<sup>28</sup> Consider the difference to Moses in the desert between seeing a forest of oaks and firs on this day and seeing a forest of fruit and nut trees ripe for the plucking. It would be natural for him to associate it with the "land flowing with milk and honey." The light faded to black, and Moses knew the third day's evening had begun.

## **Filling the Creation**

In his vision, the darkness yielded to light. Moses found himself again on the newly green land surrounding the newly formed sea, though if it seemed to him that he walked there, he doesn't say so. A bowl of light—bright gray clouds—enclosed the clear air. Perhaps there were mists covering the land. Again he heard God speak: "Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years: and let them be for lights in the firmament of the heaven to give light upon the earth."

A minute later, perhaps, in his vision, Moses saw in the brightness of the clouds something even brighter, though white and nebulous. Perhaps the clouds were burned away, revealing blue sky, but the text does not mention blue sky. It may be that what was seen was not a yellow sun in a blue sky but a glow of light from the "greater and the lesser lights" through the overcast, day and night. The Noels argue that even these lights were not seen at this time because of the cloud cover,<sup>29</sup> but while Moses does not specifically say he saw the "two great lights," he does confirm that God made them, suggesting that God's word was obeyed. If he did not see them in the vision, it seems odd that God would a lot to them a day of Creation. If this were a vision, God commanded that the lights appear, and they appeared. The "waters above the earth" had reached their full height, thus expanding and thinning and allowing more light to pass through. As God began lifting them on the first day light appeared. As He continued lifting them on the second day sky appeared between the clouds and the waters. On the third day the lifting continued, unmentioned, even as land and vegetation appeared. Now, on the fourth day in this vision, the "waters above the earth" were high

<sup>&</sup>lt;sup>28</sup> The word translated "grass" in the KJV,  $de\check{s}e$ , usually is specific for "new fresh grass." Mark D. Futato points out that Cassuto and Budde claim that in Gen 1:11, the word refers to "all vegetation, which is then subdivided into plants and trees" (NIDOTTE, 1:999–1000). Sailhamer accepts this, adding that the vegetation is only fruit and nut trees and plants yielding seed good for food. "The selectivity of the Creation account can be seen in the fact that it focuses only on the 'seed-bearing plants' and "fruit trees.' Those are the plants that are for man's food. No other forms of vegetation are mentioned" (*Genesis*, 31–33; see also *Genesis Unbound*, 126–127). Another possibility not requiring an unusual translation of  $de\check{s}e^{2}$  is that Moses saw green grasses carpeting the land and providing food for the animals and plants and trees yielding food for mankind.

<sup>&</sup>lt;sup>29</sup> See 114–116.

enough and diffuse enough for the glorious sun to be seen, at least in part.<sup>30</sup> God says "Let there be lights," but He does not specifically mention sun, moon, or stars. Moses himself explains, "He *also* made the stars" (emphasis added). This may suggest that Moses did not see the stars in his vision, yet feels himself able to confirm, on the basis of God's command, that God made them, as well.

In the vision the sun quickly crossed the sky, the sky's silver light faded to dusk, then glowed more dimly as the "lesser light" appeared in the sky. Now, perhaps, the vision would not fade to black at the close of every day, but the revolutions of the days would be apparent. Verses 16–19 are simply Moses' prophetic and poetic comments on why God made these "great lights." God commanded "Let there be lights," and the lights appeared.<sup>31</sup> This need not mean they were created at that instant. It was Moses, commenting, who affirmed that the lights were made by God.<sup>32</sup> If this is understood as an affirmation of God as maker or creator of these lights—which in the land of Moses' birth were themselves worshiped as gods—then the text no longer seems to be saying that God created them at that moment, but only that He made them. When? Verse 1 tells us: "In the beginning."

Our experience with time-lapse photography prepares us for the appearance of vegetation on the third day, but what of the fifth day? In his vision, again Moses heard the voice of God: "Let the waters bring forth abundantly the mov-

<sup>&</sup>lt;sup>30</sup> A gloss on the text in the New Scofield Reference Bible reads, "The sun and moon were created 'in the beginning.' The 'light' of course came from the sun, but the vapor diffused the light. Later the sun appeared in an unclouded sky."

<sup>&</sup>lt;sup>31</sup> We should bear in mind that according to this reading of the text, God was showing Moses in vision what He wanted Moses to report about the creation, not necessarily showing him a replay of exactly what happened. What we know of how prophetic visions work suggests that there may be a difference between God using the specific words "Let there be lights" on the actual day God did these things and God saying "Let there be lights" in the vision so Moses would understand that on this day the lights appeared at the command of God. We sometimes forget that there is a difference between a vision and a television newscast of actual events. By giving Moses this vision, God revealed the truth behind the ancient Near Eastern myths, revealing Himself as the Creator, but He did it in such a way that Moses would have been able to see the slight similarities the myths bore to the truth and understand that God was providing a corrective to a mis-remembered and mythologized picture. This does not mean, however, that God necessarily presented the entire story of everything He said and did during the creation week.

<sup>&</sup>lt;sup>32</sup> The word  $(\bar{a}\delta\bar{a}h)$ , used 2,627 times in the OT, and translated here as "made," has a wide range of meaning and does not necessarily mean creation *ex nihilo*. Sailhamer writes, "When the text says that on the second day God 'made' the sky and the land, it means the same as the English expression 'to make' a bed. Elsewhere in the Bible the same Hebrew word is used to describe cutting one's fingernails (Deuteronomy 21:12), washing one's feet (2 Samuel 19:25), and trimming one's beard (2 Samuel 19:24). The same word also means 'to appoint' and 'to acquire.' The word means to put something in good order, to make it right. When the land was covered with water, it was not yet right (or fit) for human beings. God commanded the waters to recede from the land so that it would be a dry place for human habitation. It was in that sense that God 'made' the land and the sky on the second day" (*Genesis Unbound*, 107–108). Likewise, he sees the "lights" on the fourth day as having been "set in order" "so as to be beneficial for humanity" (ibid., 131).

ing creature that hath life, and fowl that may fly above the earth in the open firmament of heaven." What did he see? The sea creatures could appear below the surface of the seas God had gathered, out of sight, so Moses needn't see anything until they leaped above the waves or he looked into the water. But what of the flying things? At God's command, did they suddenly appear in mid-air, in mid-beat of their wings? Did they appear on branches with a pop or an arpeggio played on a harp, then take to the sky with a great flapping of wings? Did they have to learn to fly? Did they appear as chicks and shoot out feathers and grow in size rather like the grass and trees may have matured? Did they all appear at once, or did God work on one at a time?

In Gen 2:7, 19 we learn that God formed Adam from dust ( ${}^{c}apar$ ) and birds and animals from the ground ( ${}^{\prime a}d\bar{a}m\hat{a}$ , clay, a synomyn of  ${}^{c}ap\bar{a}r$ ). "Let the waters bring forth abundantly" suggests that water creatures were made from water. However, a better translation might be, "And God said let creatures with the breath of life teem in the waters." Genesis 1 does not tell us what they were made from. In v. 21 Moses tells us God's command was obeyed. He adds that among what he saw were the "great creatures of the sea" [NIV], the *tannîn*.<sup>33</sup> Evidently these were not whales (as in the KJV), but creatures that could live in inland lakes. (This does not mean, of course, that whales were not created at the same time elsewhere, unseen by Moses in his vision.)

God then blessed these creatures. Verse 22 says, "And God blessed them, saying, Be fruitful, and multiply, and fill the waters in the seas, and let fowl multiply in the earth." The text does not say God blessed them, then commanded them to be fruitful and multiply. It seems likely that even though "Be fruitful" is an imperative, it is in fact the blessing God uttered. Thus, God blessed these creatures with the gift of making more of their kind. This was not a command to be carried out in perpetuity, however onerous it might be, but a gift made possible through a blessing which was in itself miraculous, as it conferred the ability to reproduce. Similarly, when Jesus said, "Rise up and walk," he was in fact blessing a person with the gift of healing. In his creative word was the enabling of the blessing.

When God said "Let there be light," there was not yet light. The day began as the light appeared. Perhaps we should imagine the voice of God on the fifth day sounding just at dawn. Perhaps Moses didn't actually see the birds appear. Perhaps the first he saw of them was when they rocketed off dark branches and soared in silhouette into the sky. Imagine the brief vision zooming in on hundreds of wonderful birds as they flew, as they landed, as they preened and strutted. Imagine middle shots of groups of birds among the trees, long shots of vast flocks in the sky. Imagine Moses carried in vision to the shore of the newly pre-

<sup>&</sup>lt;sup>33</sup> Maarten J. Paul writes, "From Ezek 29:3 and 32:2 many deduce that the crocodile or the hippopotamus is intended. Yet a greater and mightier sea creature is more likely" (*NIDOTTE*, 4:313–314).

pared sea and seeing fish and other water creatures as they presented themselves. Then the scene faded with the sun, and Moses knew the fifth day of God's creation was ending.

Again at dawn in the vision, now the sixth day, Moses heard God's voice: "Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind." In the next verse Moses tells us God made these creatures, but he doesn't give us details of that making. It is easiest to imagine the sun rising and waking these animals, created at God's command on the sixth day but before it was light. In the vision the shot dollied or cut from animal to animal as they stretched and yawned, rose to their feet, and praised their Creator, each in its distinctive voice. He needn't have seen all of them. Perhaps he saw a representative sample. Perhaps he saw the representatives of each "kind" God created, before the variation God created in them led to the multitude of "species" we see today.

In Gen 2:19 we are told God formed these creatures out of the ground, while in 1:24 God commands specifically that the land bring them forth. We should see these as synonymous. If we do, we discover that Gen 2:19 does not necessarily tell us God formed each of these animals as a potter forms a vessel, using hands to mold the clay. Instead, they both tell us these creatures were not created out of nothing, but were made using the elements found in the ground created "in the beginning." There is, thus, a connection between land and creature. In the KJV, God says, "Let the earth bring them forth," as if the land were their mother bringing them forth as children. "Mother Earth" is a pagan conception, however, and it seems likely that as in his treatment of the "lights" on the fourth day, Moses is avoiding pagan conceptions of creation.<sup>34</sup> Instead, God uses

<sup>&</sup>lt;sup>34</sup> The section on the creation of mankind in the Babylonian flood story known as "Atrahasis" has similarities to Gen 1 and 2 which have led some scholars to speculate that the Genesis chapters are based on it [see Miguel Civil's translation in Lambert and Millard, Atrahasis: The Babylonian Story of the Flood (Oxford: Oxford UP, 1969)]. There are also echoes of the ideas of the incarnation, atonement, eucharist, and baptism. The "image of god" is achieved by incorporating the flesh and blood of a god with the clay of the earth. This is done so man will have intelligence. The purpose of the creation is so mortal man can do the dirty work previously done by gods condemned to dwell on earth-they have already themselves dug the Tigris and Euphrates. This reminds one of the curse placed on Adam in Gen 3:19. Note the following lines, taken from Myths From Mesopotamia: Gilgamesh, the Flood, and Others, translated by Stephanie Dalley. "Belel-illi the womb goddess is present— / Let her create a mortal man / So that he may bear the yoke . . . / Let man bear the load of the gods!... On the first, seventh, and fifteenth of the month / I shall make a purification by washing. / Then one god should be slaughtered. / And the gods can be purified by immersion. / Nintu shall mix the clay / With his flesh and blood. / Then a god and a man / Will be mixed together in clay. / Let us hear the drumbeat forever after, / Let a ghost come into existence from the god's flesh, / Let her proclaim it as a living sign, / And let the ghost exist so as not to forget the slain god." (Available on-line at www.piney.com/Atrahasis.html.) Given the frequency with which stories of the creation and the flood are found among cultures around the world, one might well argue that they are all based to some extent on ancient memories of an actual event, fuzzy or distorted as they may be. [Mary Wakeman studies the cosmic conflict idea in twelve cultures in God's Battle with the Mon-

a form of the word  $y\bar{a}_s\bar{a}^s$ , which throughout the OT is frequently used in the concept of ransom or redemption.<sup>35</sup> Perhaps we should see in this command—only metaphorically, of course—God's liberation of life from the ground, rather as in the resurrection our bodies will be liberated from the grave. If we make something out of clay, we use our hands, but when God makes it, His words can serve as hands, as did the words of Jesus when He healed, and as will the final call to "Come forth" at the return of Christ.

In the vision, after he had reveled in the beauty of the animals, Moses again heard God's voice: "Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth."

What did Moses see? If he did indeed see Gen 1 as a vision, then Gen 2 seems to be a separate vision, a close-up view of the creation of Adam and Eve.

ster: A Study in Biblical Imagery (Leiden: Brill, 1973). According to Boyd (78), she finds that the similarities are as follows: "A hostile monster threatens creation; a heroic god defeats the monster and releases forces necessary for life; and the god then controls or fashions these life forces to bring about the creation of the world, or at least significantly influence life in this world."], I would suggest that we should see "Atrahasis" not as a complete fabrication, but as an embellishment of an ancient true story passed down from Noah. Genesis 1, by contrast, if indeed based on a vision, can be seen as God's corrective of a garbled story. One aspect of these Mesopotamian stories of the creation worth further exploration is the "God at war" theme. In places, we find sky gods and earth gods at war with each other, with man caught in the middle. This is similar to the story of the fall in Gen 3, but it may be that some of the details of the battle recall truths passed down from Noah, but not collected in Genesis. (Of course, one must be very cautious in finding veracity in such mythic accounts.) For example, in the Babylonian poem "Enuma Elish," tablet 1, we find these lines: "And Tiamat [a goddess of chaos condemned to dwell in the abyss of the earth] harkened unto the word of the bright god, and said: . . . let us wage war! / . . . They [the earth gods she created] banded themselves together and at the side of Tiamat they advanced; / They were furious; they devised mischief without resting night and day. / They prepared for battle, fuming and raging; / They joined their forces and made war, / Ummu-Hubur [Tiamat] who formed all things, / Made in addition weapons invincible; she spawned monster-serpents, . . ." The hero-son of the greatest sky god offers to go to earth and fight Tiamat. He says, "O my father, let not the word of thy lips be overcome, / Let me go, that I may accomplish all that is in thy heart." His father says, "The neck of Tiamat shalt thou swiftly trample under foot." The son says, "O Lord of the gods, Destiny of the great gods, / If I, your avenger, / Conquer Tiamat and give you life, / Appoint an assembly, make my fate preeminent and proclaim it." [Taken from the L. W. King translation, from The Seven Tablets of Creation (London: n.p., 1902), available on-line at www.sacred-texts.com/ane/enuma.htm.] On tablet 11 of the Old Babylonian version of the flood story in the Gilgamesh Epic, the rain lasts six days and nights. On the seventh day Utnapishtim (also called Atrahasis, and synonymous with Noah) sends out a dove. Here too we find an echo of creation week, as the days of creation are substituted for the days found in the Genesis flood story. There are more interesting parallels with the cosmic conflict idea in tablets 4-6 of "Enuma Elish" [see E. A. Speiser's translation called "The Creation Epic" in The Ancient Near East, Volume 1: An Anthology of Texts and Pictures, ed. James B. Pritchard (Princeton: Princeton UP, 1958), 31-39.] See also James E. Atwell, "An Egyptian Source for Genesis 1," Journal of Theological Studies, 51/2 (October 2000): 441-477.

<sup>&</sup>lt;sup>35</sup> Eugene H. Merrill, *NIDOTTE*, 2:498–500.

In the vision of Gen 1, however, we don't find the detail we find in Gen 2. We don't see God forming man from dust. It is possible that Moses left out the details because he knew they would be in Genesis 2. It is also possible, however, that in this "movie" the details weren't seen. Perhaps he heard God's voice, then, a few minutes later, saw male and female walking together, as if God worked in private.

What is most significant is that in his vision, Moses saw clearly that the creation of man was separate from the creation of the beasts and insects. Mankind was made in God's "image," and while they were made from the same chemicals as the beasts, there was a difference. They were not fellow creatures on the same level, but separate, set apart and above.<sup>36</sup>

Again Moses heard God proclaim a blessing. There is no mention of his hearing God bless the land creatures, but only the sea and air creatures. However, as they too reproduce, we can deduce that even if Moses did not hear this blessing in his vision, the animals too were blessed. What he hears is a blessing on the male and female made in God's image. Their blessing allows them not only to reproduce but to govern all other animals.<sup>37</sup>

<sup>&</sup>lt;sup>36</sup> Raymond C. Van Leeuwen (*NIDOTTE*, 3:643, in his article on "Form, Image") quotes Lichtheim's translation of the Tenth Dynasty Egyptian "Instruction Addressed to King Merikare" (ca. 2050 BC): "Well tended is mankind—god's cattle, / He made sky and earth for their sake . . . / He made breath for their noses to live. / They are his images, who came from his body . . . / He made for them plants and cattle, / Fowl and fish to feed them. . . . / When they weep he hears . . . / For god knows every name." It is worth mentioning—and this applies to all ANE texts—that translation is an imperfect art inevitably colored by the presuppositions, biases, and education of the translator. Where one translator may find on a tablet words very similar to a biblical text, the next scholar to translate that tablet may read something quite different. It is useful to compare translations wherever possible.

<sup>&</sup>lt;sup>37</sup> Philip J. Nel points out that the cognate verb *redû* in Akkadian means to drive or guide animals, as would a shepherd, even though the Hebrew  $r\bar{a}d\bar{a}h$  is closely tied to kingly dominance by force (NIDOTTE, 3:1055–1056). Perhaps we should see the rulership of Adam and Eve in the light of Jesus' words about Himself as the Good Shepherd. There is another aspect worth considering, however, even though a full study cannot be done here. Van Leeuwen writes (4:644), regarding scholarly understanding of "the image of God," "In recent research, Stendebach discerns two main lines of interpretation of the image. First, humankind is God's representative upon earth, given the task of dominion over the nonhuman creation. The second model sees humankind as God's counterpart (Gegenüber Gottes), so that a dialogical relation between God and humankind exists (Stendebach, 1051-52). Both models are valid, in that they express aspects of being 'in the image of God." Consider this, however. When David and Goliath fought, they fought as champions (1 Sam 17:4, 23). Goliath explained what that meant (v. 9): "If he be able to fight with me, and to kill me, then will we be your servants: but if I prevail against him, and kill him, then shall ye be our servants, and serve us." In other words, one stood as representative for all-winner take all. This is precisely what happened when Adam yielded to temptation. Paul tells us, in Rom 5:15, "For if the many died by the trespass of the one man, how much more did God's grace and the gift that came by the grace of the one man, Jesus Christ, overflow to the many!" (See also Rom 5:16, 19; 1 Cor 15:22.) By this understanding, the image of God in Adam may have been less Adam as vicar of God representing God to the rest of the creation than God's designation of Adam as His champion in the fight against the serpent, Satan (Rev 12:9; 20:2). Adam, of course, lost that battle and so delivered his dominion into

We have tended to imagine, in our reading of Gen 1 and 2, God speaking the animals into existence, but molding man from dust with His own hands, kneeling beside him, and breathing life into him. However, the word for how God "formed" man from dust in 2:7 is the same word found in 2:19 explaining how God "formed" the animals. We might argue that 2:7 mentions God breathing into man's nostrils, while there is no mention of this intimate act in the forming of animals in 2:19, so there was actual physical contact. However, this breathing may also be metaphorical, an anthropomorphism, just as the forming from dust is a much simplified symbol for the inconceivably complex work God performed with such apparent ease.

### **The Function of Prophetic Symbols**

This leads to a difficult question. Certainly the fact that there is no description of the process of making man in Genesis 1 doesn't necessarily mean Moses didn't see that process at the time. It may have happened in the distance, without him being able to see the details. He may have seen the details and left them out. On the other hand, if Moses didn't see the details in the first vision but did in the second, this suggests that what he saw in either vision or both may have been, to a certain extent, symbolic, as is so often the case in Revelation. (For example, Christ's appearance as a slain lamb in Rev. 5 does not mean He actually looks like a lamb today. Likewise, the plagues of Rev. 16 need not be literally poured out of literal bowls, even though that's what happened in the vision.)

It is possible that creation occurring as a result of God's spoken word may be a symbolic way of revealing God's creative power and claiming Him as the author of it all. It's possible, for example, that in fact God spoke each kind of plant or animal individually into existence, or formed each from dust, even though it didn't appear in the vision. It may be that the forming of Adam from dust and God's breath was indeed what Moses saw in the second vision, but was meant to symbolize God's making of mankind from chemical compounds, rather than by man's suddenly appearing *ex nihilo*. Likewise, the use of Adam's rib in making woman may have been a symbolic depiction revealing the relationship between male and female, rather than the actual way it was done.<sup>38</sup> That's how visions work.

slavery to Satan, but God arranged a rematch, this time not with his created "counterpart," but with His Son, incarnated, as the Champion. Salvation by Champion is not as thoroughly attested an analogy for what Christ accomplished on the cross as is ransom/redemption or forensic justification, but it is nonetheless there and true.

<sup>&</sup>lt;sup>38</sup> The sharing of a rib, the part closest to the heart, symbolizes a unity of mental and physical rank or stature, with the exception that Adam is God's champion and Eve is not. (This is why, when God seeks out Adam and Eve after the fall, He first specifically addresses Adam, not Eve. This is not an indication of a pre-fall headship, as some have argued, but of Adam's role as God's champion, which is entirely irrespective of gender and cannot be passed on to his descendants, as it is a role assigned to a single individual by God. As Adam was the champion, and had by his fall cost God the battle, it was appropriate that God address him first.)

The possibly symbolic purpose of certain aspects of the vision, of course, does not mean that everything was symbolic, and even symbols have specific referents. It seems very clear from the text that God was communicating creation by days, not by aeons, and that God proceeded systematically and logically, not by way of some promiscuous evolution from primeval slime.

Did Moses see God in this vision? Certainly he heard God. One might argue that he knew man was made in God's likeness because he could see God and see the resemblance between God and His children. Many scholars have argued that the "image of God" mentioned here was not physical appearance but something else.<sup>39</sup> It is possible that throughout this entire vision Moses stood beside God and watched Him at work. But if he did, he didn't say so.

It is clear, in any case, that Moses heard and reported the words God wanted him to hear. Whether or not they were the exact words God spoke at the time of creation doesn't really matter. They were the words God wanted to communicate to us to reveal what He wanted us to know about His mighty acts. In the light of the way words are given in Revelation, we may well err if we assume these were the only words spoken in that week. We might also consider whether in that week God spoke in a language Moses could understand, or whether those words were translated for Moses in his vision. As Job discovered, our duty is not to know God in His entirety but to accept Him as He reveals Himself.

Then God gave further instructions: "Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat. And to every beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth, wherein there is life, I have given every green herb for meat." Is this all God would have said to Adam and Eve on that day? Surely not. But it seems to be all God said to them in that vision. Again, it would not have been at all difficult for them to know which trees and herbs they could eat from, if we are right in understanding the text to say that the only vegetation Moses saw was either the grass meant for the animals or the trees and herbs that bore food for mankind.

Once more, Moses realized God was pleased with what He had made, though whether or not He said so is not clear. The sun went down, the sixth day was ending, and God had finished making "the heavens and the earth . . . and all the host of them." This last sentence, the first verse of chap. 2, seems like a summary. In cinematic terms, we might see it as the vision's credits: "Produced by God; Directed by God; Filmed on Location." However, Sailhamer prefers to see Gen 2:4 as the summary/title of Gen 1 and perhaps also Gen 2.<sup>40</sup> I prefer to

 $<sup>^{\</sup>rm 39}$  See Van Leeuwen, 4:644, for a summary of scholarly approaches to this question in the 20th century.

<sup>&</sup>lt;sup>40</sup> Genesis Unbound, 102–103.

see Gen 2:1 as a summary of God's work serving to separate the first six days from the seventh.

## The Separated Day

The vision wasn't over. There are two more verses, and there was one more day. A technique frequently found in movies is showing scenes of celebration or bonding of relationship during the credits. Perhaps we should see the seventh day in this light—a happy ending.

However, chapter divisions weren't made until the  $13^{th}$  century, and verse divisions weren't made until the  $16^{th}$  century. I would suggest that v. 1 and the first clause of v. 2 should be seen as one sentence, as follows: "Thus the heavens and earth were finished, and all the host of them, and on the seventh day God rested."

What follows in vs. 2 and 3 is an example of that wonderful Hebrew rhetorical form called a chiasm, or reverse parallelism, in which the most important idea is sandwiched between one or more sets of parallel phrases or passages. Note the similarities between the end of v. 2, "and he rested on the seventh day from all his work which he had made," and the end of v. 3, "because that in it he had rested from all his work which God created and made." These nearly identical phrases alert us to the possible presence of a chiasm. What is the central idea at the heart of this chiasm? "And God blessed the seventh day, and sanctified it." The phrase "seventh day" and its pronoun "it" are repeated at the center of the chiasm, tying together the three parts.

A and he rested on the SEVENTH DAY from all his work which he had made,

B and God blessed the SEVENTH DAY, and sanctified IT,

A' because that in IT he had rested from all his work which God created and

made.

The seventh day is the only day without the "evening and morning" formula, as if in it is no darkness at all. It is the only day named three times, as if to make completely clear for all eternity that it is the *seventh* day and no other. (Likewise, the Sabbath commandment begins with the word "Remember.") It is the only day God blessed. "Sanctified" means essentially "set apart," especially for holy purposes. Again this is unique among the week's days.

But what did the vision look like? How did the vision communicate the idea of God resting? Did it show God lying on the grass with His head leaning on one elbow? Did it show God walking through the garden with Adam and Eve? Did Moses deduce God's rest from the absence of creative activity without seeing Him? Did Moses see God in his vision but choose not to describe Him? Perhaps. These verses are also unusual in that only in the description of the seventh day is God not quoted. Moses says God blessed the day and set it apart. Blessings are

conveyed by words, so probably Moses heard God speak in his vision, but we are not given the exact words.

Perhaps as the light came up on the seventh day, Moses heard God call out His blessing on this day of rest. Then, in the last minutes of the vision, God showed him scenes of this new land, complete and perfect and at rest. Earlier in the week the vision had focused on parts of creation. Perhaps on this day he saw those parts interacting smoothly and beautifully.

## Conclusion

We have no sure way of knowing, of course, if Moses saw Gen. 1 as a vision or received it orally or in writing. If he received it orally or in writing, we might wonder about the source or the accuracy of transmission. If he received it in a vision from God, we can be sure of its inspiration, sure that what Moses saw was what God wanted him to see. That does not mean what he saw was a realtime depiction of what happened, nor that God carefully explained everything Moses saw. The vision format allows for the possibility of certain aspects being symbolic, for that is often the case in biblical visions. (We see, for example, the appearance of land, but not the physical process by which the land responded to the call for it to come forth.) However, this is the picture of creation accepted as trustworthy fact by the rest of the authors of the Bible and by Jesus. If we accept the Bible's inspiration, then we must accept that this is what God wants us to believe about creation.<sup>41</sup> If there are complexities not mentioned—and certainly there are—they do not affect our salvation. On the other hand, a failure to accept this vision as a revelation of truth leads naturally to doubting the word of any Bible author who accepted it as true and based doctrine on it.<sup>42</sup>

Imagining Gen. 1 as cinema helps us glimpse the original form of the vision. It is clearly not a picture of gradual and accidental evolution, not an action movie about the defeat of the chaos monster, but a carefully edited revelation of nature obeying its Master's command. Despite its possible symbolic elements, it is clearly meant to be seen as a period of days, not ages. Recalling the techniques of cinema and of visions, we can understand why there are so few words, so few scenes, for we know that through clever editing the part may suggest the whole. Moses was given enough information for him to understand and retell the

<sup>&</sup>lt;sup>41</sup> One might argue that the "evening and morning" formula found six times in Gen 1 was Moses' misunderstanding of the cinematic fade to black technique between scenes, as God Himself does not call these scenes days. However, it is difficult to argue that Moses did not see these as literal days. If he was mistaken, then surely the God who spoke to him "face to face" could have corrected him on such an important point. One might also suggest that the making of animal life from dust symbolized a lengthy process of evolution from some primeval ooze, with fish and reptiles, animals, and mankind following separate tracks, but this would be reading a modern cosmology into the story in an unacceptable way. There is certainly no sign that biblical authors understood it that way.

<sup>&</sup>lt;sup>42</sup> See my "Creation and a Logical Faith," *Dialogue* 10/1:28–29, for examples of doctrines tied together with creation by biblical authors.

story, but not so much that he would forget part of it or leave out important aspects.

Would this vision, transferred to the screen, win an Oscar? Perhaps not. That isn't the purpose of visions. But someday, when I get to heaven, I want to rent the video.

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