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EVALUATION OF THE NOAH FLOOD ACCOUNT AS A TRUE NARRATIVE
REPRESENTATION

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DEDICATION

In these later years of my life the pursuit of a document and degree such as this one has required the great patience and understanding of my good and faithful wife—Barbara. Our children are the fruits of the labors with my wife, and the joys of our hearts. To them I desire to leave this document as a heritage. My sisters Nancy Conlee (and her husband Bob) and Jennifer Annsoulatos (and her husband Jim) and my brother Greg (and his wife Mary) have been important Christian and/or familial supporters as well. My parents: John C.L. Leslie (now deceased) taught me to love learning, and my mother Doris G. Leslie taught me about God’s faithfulness and love. Buddy and Lorraine Fisher, Dr. and Mrs. Paul Fisher and Clarice Leslie helped me to understand God better.

I would also like to express my appreciation to Dr. Steven Collins whose school, Trinity Southwest University, has given me an avenue to pursue this project. I had as a child and a young man seriously considered becoming an archeologist, but was directed, till recently, into other activities (by God I believe). It has been a great joy in my life to have re-entered the field of Biblical archeology. As well, Dr. John Moore, teacher at TSWU and a guide to the Middle East, has given me a better understanding of the region regarding the history of it. My primary desire in pursuing an archeology degree at this time is for the sole purpose of going into Christian colleges and schools to teach on the authority and authenticity of God’s Holy Word the Bible.

I have had so many teachers, many whom I don’t remember their names, who demanded that I do my work and expected me to accomplish something with my life—even when I

did not see it. However, there were key teachers in my life. Dr. Lawrence Sandberg, a leading scientist in the field of biochemistry, took me under his wings when I was a young graduate student. In his laboratory I studied protein sequences and structures, became a Christian, met my wife, learned about missionary endeavors, and earned a degree that would open other doors for me. One of those doors was the opportunity to work in Australia in the laboratory of Dr. Barry Oakes. As well, in that country I met numerous people that would have a lasting impact on me. Dr. Clifford Wilson introduced me to Biblical archeology and to the Creation Science Foundation with Ken Ham and John MacKay. Later I would meet Dr. Andrew Snelling through the same organization whose books on geology from a Creationist perspective have been a great source of information. As well, I read many books by Drs. Henry Morris, Duane Gish, and Steven Austin at the Institute for Creation Research. Later (back in the USA), Drs. John Baumgardner and others (including Dr. Snelling) at ICR would continue to give me a greater understanding in the field of geology. I was influenced in the field of biology by Dr. Gary Parker. In the Anglican Church and with the Catholic Church in Australia, I became involved in medical ethics and I became a member of the pro-life community. The writings of Dr. Nick Tonti-Philipini gave me Christian perspectives of the issues of *in vitro fertilization, abortion* etc. in the midst of a sea of secular opinions that surrounded me.

After that period of time and in my pursuits of the field of medicine many people impacted my life, especially at Oral Roberts University Medical School. These included Drs. Durwood Ray and Bill Driscoe in the study of DNA structure in certain cancers, and

Dr. Milton Olsen (in Administration). Dr. Dan Plunkett, a Godly and kind man, watched over my progress in residency at the University of Oklahoma School of Medicine-Tulsa.

Other Christians who have affected my life at various stages include the pastors: Jim Powers, Father Ken, Brian Thewlis, Richard Exley, John Luginbuhl, Roger Scarbro, Greg Johnson and Bill Overton. Members of my extended family and also pastors include Jim Souza and Keith Hansen (who married us). Herb Mosher helped me with philosophy and religion. Terry Wolt, Howard Larson, Jim Brown, Charles Hamit, Ted Christian, and others have been good and faithful Christian friends.

Finally, it by the grace of God the Father, through His son Jesus Christ, by the power of His Holy Spirit that I have been regenerated and saved to a new life in Him. Without His constant help I would not be able to stand or to become more of what He wants me to be. I marvel at His grace extended towards me.

ABSTRACT

The Noah flood account of the Bible is one of the most well known stories among mankind. Yet, its historicity has been questioned throughout much of the times of the records of mankind;¹ and this skepticism among many has accelerated in the last 200 years.² Yet to others, as part of the canonical Bible, it is considered to have come from the mind of God to man.³ Was it a true event? Was the basis for it a local or worldwide flood? In light of the prominence that the Bible gives it, a correct understanding of the Noah flood story is foundational to comprehending mankind's relationship to God.

Dr. John Oller has developed a linguistic tool to evaluate the truthfulness of narrative eye witness reports. Fictions, errors, and lies have all been shown to be degenerate forms of a True Narrative Representation (TNR).⁴ This tool is described and applied to the Noah flood account. The TNR is composed of 3 criteria: 1) **Determinacy**, 2) **Connectedness**, and 3) **Generalizability**. Determinacy reviews whether the objects of the narrative are

¹ In 1 Peter 3:18-20; 2 Peter 2:4-5 Peter mentions that those who were disobedient in the days of Noah perished in the flood. They did not believe the message of Noah. This letter was written around 63 A.D. *The Chronological Study Bible* (Nashville, TN: Thomas Nelson, 2008) 1380, 1384 and 1389.

² See text below.

³ Conant commented on the divine revelation of the book of Genesis, "The claim of this book, to be regarded as a part of divine revelation is established beyond question by the authority of Christ and his apostles. It was part of that collection of sacred writings, the Oracles of God, which were committed to the care and guardianship of the Jewish people (Rom 3:2). Of these writings, collectively, the Savior and his apostles often speak as the word of God; recognizing, and directly asserting, their divine authority and inspiration. See such passages, for example, as Matt. 5:17-19; John 5:39; Rom. 3:2; Matt. 22:43; and Mark 12:36; 2 Tim. 3:16; 1 Pet 1:10-12; 2 Pet. 1:21. This book was, therefore, as a part of these divine writings (called in the New Testament the Scriptures, the Holy Scriptures, the Oracles of God) expressly recognized by the Savior and his apostles as of divine authority, and was declared to be 'profitable for teaching, for reproof, for correction, for instruction in righteousness' (2 Tim. 3:16)." Conant, T.J., ed., *The Book of Genesis* (New York: American Bible Union, 1868), X-XI.

⁴ J.W. Oller, S.D. Oller and L.C. Badon, *Milestones Normal Speech and Language Development Across the Life Span* (San Diego, CA: Plural Publishing, 2006).

realistic; Connectedness assesses the time sequential pattern of the subsets of the event; and Generalizability is used to confirm its reproducibility (if the event is reproducible) or to explore evidence for expected residua if it was a once in a time occurrence.

Results:

The Noah flood account contains common and unique words. Words such as those used for “hill” and “ground” have cognates in other ancient Near East languages, and their use in the Bible makes clear their import. Thus people of the time would have been able to read the account and understand it. It also argues for it being of early composition. As well, there are two significant and unique words- for the “ark” and the “flood.” These words do not appear in any other part of the Bible (e.g. Genesis and Psalm 29—see text), nor is it clear that they appear to have any Near East cognates. By use of these terms, when other common ones were available, implies that the author chose them to emphasize the uniqueness of the event. Its construct is consistent with the concept of an event where water covered “all,” i.e. the entire, crustal earth. Thus, the account meets the criteria for **Determinancy.**

There is a logical time sequence to the sub-events of the flood. A crescendo/decrecendo pattern is seen, with the flood waters rising and then draining away. It is formulated within a chiasmic structure. This is a well known linguistic tool in the ancient Near East and its use in the flood narrative argues both for the antiquity and unity of the text. Yet, some Bible analysts, the Documentarians, have argued for a piecemeal composition of the Noah flood account. If this were correct it would weaken the veracity of it as a TNR.

However, there is much evidence against the Documentarian view. There are other linguistic structures such as *geneologic inclusio*, *repetitio mater studiorum*, purposeful textual discontinuity, as well as the chiasmic structure, which are seen in the flood account that support the unity of it. The account thus meets the criteria for **Connectedness**.

If the flood story was based on a local event, it would not have been unique among the histories of the nations. Residual evidence for it would be difficult if not impossible to verify. However if a worldwide flood did occur, it would have been unique, as this sort of flooding is not occurring today. Residual evidence for this sort of event ought to be discoverable.

Residual evidence for the flood account is seen in the continental crust. This superficial area of the surface of the earth, which is above the oceans and seas, is composed of between 70-80% sedimentary strata (this does not include the vast areas of igneous and metamorphic rock which lie beneath the sedimentary rock), with crushed fossil groupings, called death assemblages, throughout it. Radiometric C¹⁴ dating of fossils throughout deep and shallow strata has given similar ages for them. These and other observations argue for the land surface area of the earth having been inundated by vast amounts of muddied waters with a subsequent rapid and sequential deposition of layers of these materials upon it. There is evidence supportive of the land portion of the earth being of one piece initially and then subsequently breaking up into continents. Collisions between drifting continents appear to have been the cause of mountain formation. This also appears to have occurred after these areas had been covered with the water laden

materials as many if not most mountains are composed at least partly by sedimentary strata. This is consistent with information given in the Book of Genesis describing the creation of the earth and the subsequent flooding of it.

DNA sequencing data support the development of all mankind from one common stock of a small group of people over a very short period of time. Population growth studies support this, and the evidence supports a spread of people groups from the Near East into other parts of the world early in their history. Animals appear to come from small groups as well. The “kinds” of animals taken onto the ark may have been representatives of the Family or Genus level classification. Given the reported size of the ark this would be feasible. Thus, both humans and animals appear to have recently come from small groups. This would be consistent with the consequential results of the Noah flood story.

Anthropological evidence such as linguistic associations between geographically separated people as the Chinese and the North American Native Americans argues for the commonality of mankind. Flood stories from virtually every culture throughout the earth, which have at least 5-7 common features, argue for this common unity of mankind as well. This would be expected if post-flood mankind expanded out from Noah’s family and from the Near East. There is geologic, biologic, and anthropologic evidence that supports the concept of a past worldwide flood. Thus the account meets the criteria for **Generalizability**.

The criteria for a TNR is meet by the Noah flood account. It is a reliable eye witness account of a true event that was worldwide in its effect, and it was a unique “one time” event. As a true event, the Noah flood account has great moral implications for mankind.

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ABBREVIATIONS and REFERENCES

1. Douay—The Douay Rheims New Testament Bible With Commentary by the Saints
2. Fausset's—Fausset's Bible Dictionary
3. HCC—The Englishman's Hebrew and Chaldee Concordance of the Old Testament by G.V. Wigram
4. KJV—King James Version Bible
5. NASB—New American Standard Bible
6. Naves—Naves Topical Bible
7. NIDOTTE—New International Dictionary of Old Testament Theology and Exegesis
8. Strong's—Strong's Exhaustive Concordance
9. The Strong's NIV—The Strongest NIV Exhaustive Concordance ed. E.W. Goodrick and J.R. Kohlenberger III
10. TWOT—Theological Wordbook of the Old Testament
11. WSOT—The Complete Word Study of the Old Testament
12. PNF—Petrified Forest National Park

PROPOSAL OF STUDY, RESEARCH PROBLEM, INITIAL RESEARCH QUESTION, SUBSIDIARY QUESTIONS, DEFINITIONS, ASSUMPTIONS, LIMITATIONS, DELIMITATIONS

PROPOSAL

OF STUDY

This study will use the linguistic method developed by J.W. Oller⁵ to assess the reliability of the Noah Flood story as a portrayal of a true eye witness historical event.

RESEARCH PROBLEM

It has been contested by some throughout much of written history but particularly in the last 200 years that there has been no judgment of God upon men by use of flood destruction. The idea of Noah's Flood is one of the most universally known stories among mankind; yet its veracity has been challenged, denied, vilified at every level- linguistically, historically, scientifically, and theologically. However, there may remain much in all of these fields of endeavors that support it as a true event of history. The TNR will be used as a tool to clarify/unify the evidence for it.

INITIAL RESEARCH QUESTION

A. Can the Biblical writing containing the Noah flood report be considered an accurate historical narrative? (Is it a True Narrative Representation?)

⁵ Oller et. al. *Milestones* (2006) 264-273.

1. Discuss the structures of narrative communication including Determinancy, Connectedness, and Generalizability.
2. Contrast lies, fictions, errors, and true accurate narratives.
3. Compare and contrast the Noah Flood report with other flood reports in terms of their narrative composition.

SUBSIDIARY QUESTIONS

- B. Does it describe a local or worldwide deluge? (Which concept is the description most compatible with?)
1. Compare/contrast descriptive language found in the Bible as it relates to local, regional, and worldwide events.
 2. What are some historical understandings of the views?
 3. If the Noah Flood was an historic event, what would be expected if it were only local vs. worldwide. That is, what would be the physical, geographic, social, and historical consequences? What can be predicted from it?

DEFINITIONS

J. W. Oller's True Narrative Representation involves 3 parts:

1. **Determinacy:** Empirical particulars of an episode are mapped into language by the narrator, i.e. material facts are mapped into recognizable linguistic representations.

2. **Connectedness:** There is a dynamic connection among the events of the episode which is mapped into recognizable components of the narrative. It reveals a time sequential pattern.

3. **Generalizability:** There is empirical correspondence with data that can be observed or reproduced by reconstruction of the event(s) from the narrative.

ASSUMPTIONS

As a Christian I do believe in the reality of a personal God who speaks to men, and who has moved upon men to speak and write. The Bible is an authoritative document that contains historical, moral, and spiritual concepts. I do believe that reality can be tested, i.e., I am not an existentialist. Yet, I do accept that miracles may occur as unique events not subject to scientific reproducibility. However, they should be generally consistent with known physical laws (and ones to be discovered) and follow theological principles. The Noah flood account contains certain miraculous elements.

The TNR, as described by J.W. Oller, is a proven linguistic method. It has been used in a variety of settings to assess the narrative content of written compositions. The proof of its validity is accepted, and is not a subject of this treatise (see Methods section).

LIMITATIONS

If the Noah Flood was a worldwide event and not a local one; then there has not been another like it in recorded history. Thus, I am constrained to rely upon a few secular documents and the Bible as the key documents relating to it. As well, since there is no worldwide flooding occurring at present, examination of current physical processes, regarding local flooding, must be extrapolated to what might be expected to occur in a global one.

DELIMITATIONS

In the area of Generalizability when reviewing scientific evidence for the flood I will cite significantly relevant evidence for it. I will not attempt to digress, nor am I able to cover all potentially relevant areas in the various fields of science. As well, I am not a linguist or Hebrew scholar and I will rely upon the writings of scholars in these areas.

METHODS

This dissertation investigates the narrative character of the Noah Flood Account. A narrative has been defined by one author as, “Narration is essentially a way of linguistically representing past experience, whether real or imagined. The basic characteristic of narrative discourse is that the order in which it presents events is the order in which those are claimed to have occurred in time.”⁶ Coste expanded the definition to, “Narrative discourse denotes difference in time, that is, difference between two or more states of affairs indexed with a distinct temporal situation, whether these situations are all past regarding the time of enunciation or another time of reference, or whether one is past and another future, or whether yet they are all future, and so on.”⁷ Coste also quoted Prince,⁸ that “Narrative occurs after the events and situations in the world referred to; it is of the past, it has a retrospective thrust...Narrative is conveyed by semiotically successive vehicles or media; the form of expression of narrative is homologous to its form of content.”^{9,10}

⁶ Traugott, E.C. and M.L. Pratt, *Linguistics for Students of Literature* (Toronto, CAN: Harcourt, 1980), 248.

⁷ D. Coste, *Narrative as Communication* (Minneapolis, MN: University of Minnesota Press, 1989), 43-44.

⁸ Prince, G., *A Grammar of Stories* (Paris: Mouton, 1973), 19.

⁹ Coste, D. (1989) 13.

¹⁰ Semiotics is defined as the study of signs—greatly impacted by C.S. Peirce. An editor of Pierce commented regarding Pierce’s view of signs on page 7, “A ‘sign,’ as Pierce employed the term, is also a thought, but differs from an ‘idea’ in that its meaning is not self-evident. A sign receives its meaning by being interpreted by a subsequent **thought or action**. A stop sign at a street corner, for example, is first perceived as an octagonal shape bearing the letters S-T-O-P. It is only in relation to a subsequent thought—what Pierce called an interpretant—that the sign attains meaning. The meaning lies not in the perception

Gunn and Fewell have associated the term narrative to that of a “story” by stating, “The terms ‘story’ and ‘narrative’ are often used interchangeably, though sometimes ‘the story’ is a broader term, understood as the events presupposed by ‘the narrative’ which tells the story in a particular way. But ‘narrative’ may be a generic term rather like ‘storytelling’.

We think of narrative in this sense as opposed, say, to lyric poetry, proverbs, or legal codes.” They then went on to give three characteristics of a narrative: 1) “First, narrative constructs a verbal world that imitates and centers on human characters (or personifications), their speech and actions, their relations and desires, their ideas and institutions.” 2) “Second, time is crucial for narrative... narrative is distinguished by plot.” 3) “third, narrative is also a genre which enjoys the patterning play of words-“there must be some patterning or repetition of key elements’.”¹¹ Finally, a narrative can be

but in the interpretation of the perception as a signal to stop or, better still, in the act of stopping. Peirce held that, like the perception of the stop sign, every thought is a sign without meaning until interpreted by a subsequent thought, and interpretant. Thus the meaning of every thought is established by a triadic relation, an *interpretation* of the thought as a *sign* of a determining *object*.” On page 239 Peirce was quoted as having defined a sign as, “Anything which determines something else (its interpretant) to refer to an object which itself refers (its object) in the same way, the interpretant becoming in turn a sign, and so on *ad infinitum*... A *sign* is either an icon, and index, or a symbol. An icon is a sign which would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometrical line. An *index* is a sign which would, at once, lose the character which makes it a sign if its object were removed, but would not lose that character if there were no interpretant. Such, for instance, is a piece of mould with a bullet-hole in it as sign of a shot; for without the shot there would have been no hole; but there is a hole there, whether anybody has the sense to attribute it to a shot or not. A *symbol* is a sign which would lose the character which renders it a sign if there were no interpretant. Such is any utterance of speech which signifies what it does only by virtue of its being understood to have that signification.” J. Hoopes, ed., *Writings on Semiotic by Charles Sanders Peirce: Peirce on Signs* (Chapel Hill, NC: The University of North Carolina Press, 1991). It should be noted that Peirce still referred to an object in the initial development of the Icon whether it was present later or not.

¹¹ D.M. Gunn and D.N. Fewell, *Narrative in the Hebrew Bible* (Oxford New York: Oxford University Press, 1993), 2-3.

conveyed in written, spoken, or other artistic forms.¹² The one who conveys the narrative (or story), i.e. narrator, can be presented in the first, second, or third person tense.¹³

As part of an analysis of the structure of narrative communication J.W. Oller has studied language acquisition and its use.¹⁴ He described it as a process that combines mental acquisition of physical objects, cataloging them in the mind, then their application in communication.¹⁵ The terms used for each of these steps are 1) Icon formation, 2) Indexing, and 3) Symbolism. In this he followed many of the concepts of Peirce.¹⁶ Each reflects the character of signs—thoughts that derive meaning by association with real objects and subsequent application by communication relating to life’s activities.

Icons are the actual forms as remembered in the mind.

Indexing occur when Icons are placed in context, by experience or shared attributes, with other Icons.

Symbolization is the expression(s) used to portray the icon(s) to others (see chart on Language Formation). Communities develop shared symbols. Oller has accurately shown that these are all involved in effective language development (**Figure 1**).¹⁷ IQ Testing and

¹² “Narrative.” From: www.wikipedia.org (access online 2008).

¹³ Wikipedia: mode of narration. In the first person the pronouns used are “I” and “we”; in the second “you”; and in the third “he or she, and they”.

¹⁴ Oller et al., *Milestones* (2006).

¹⁵ J.W. Oller, "Toward a Theory of Technologically Assisted Language Learning/Instruction," *CALICO Journal* 13(4) (1996), 19-43. <http://www.calico.org>.

¹⁶ As mentioned above in discussing semiotics.

¹⁷ J.W. Oller, "Adding Abstract to Formal and Content Schemata: Results of Recent Work in Peircean Semiotics," *Applied Linguistics* 16.3 (1995), <http://www.cspeirce.com/menu/library/aboutcsp/oller/schemata.htm>.

other forms of intellectual testing are directly impacted by these processes.^{18,19,20}

Oller has applied these concepts to the literary structure of the narrative. He considered it the foundational structure for all language learning.²¹ In studying it he developed what is called the **True Narrative Representation (TNR)**. It has been defined as: “A narrative, of course, is a story unfolding over time, and a true narrative is one that happens to agree with (or ‘corresponds faithfully to’) the facts of someone’s actual experience.”²²

The TNR is composed of three components;²³ 1) **Determinate**—“material content of the sign”...; 2) **Connectedness**—“content of the sign is determined in time and space”; 3) **Generalizable**—“the sign can be connected to any material context similar to the one at

¹⁸ L.C. Badon, Oller, S.D., Yan, R. and J.W. Oller, "Gating Walls and Bridging Gaps: Validity in Language Teaching, Learning, and Assessment," *Teachers College, Columbia University Working Papers in TESOL and Applied Linguistics* 5(1) (2005):1-15 .

¹⁹ J.W Oller, "Language Testing Research: Lessons Applied to LEP Students and Programs," in *Proceedings of the Second National Research Symposium on Limited English Proficient Student Issues: Focus on Evaluation and Measurement 1992*.
<http://www.ncela.gwu.edu/pubs/symposia/vol1/language.htm>.

²⁰ Oller, J.W. and S. Collins, "The Logic of True Narrative Representation," *Trinity Southwest University* (1997) 1-23. http://www.trinitysem.edu/Student/oller_collinspap.html.

²¹ Oller, J.W., *Milestones* (2006). He stated on page 265, “For language to proceed at all, it is essential for the child to have access to true representations that are fitted into meaningful narrative-like sequence of experience. That is, the child has to have access to activities of the sort that involve the use of signs to be acquired and the signs have to be appropriately applied in those contexts. Without exposure to such data, the child could not acquire any zero order predicates whatever. The child requires access to true uses of conventional signs to discover those conventions. However, true uses of the required kind only occur in association with narrative-like event sequences. Therefore, language acquisition requires exposure to what we have called true narrative representations. These are narratives, or narrative-like representations of someone’s actual experience, that are true (as far as they go) to the experience represented.”

²² Oller, *Calico J.* (1996), 24.

²³ *Ibid*, 25.

hand.” Thus, the symbols of language formation can be used to compose a story (Figure 2).

Determinancy investigates the structure of nouns, some verbs, and other sentence constructs of the narrative. The question is explored- is the narrative composed of realistic identifiable known physical objects with known properties?

Connectedness evaluates the sequencing of individual frames of the story. Is there a realistic time line—beginning and end? Does it progress in a realistic continuum?

Generalizability allows the analysis of the event by comparing it to other similar constructs, and analysis of its inherent properties. Does it still continue to happen? If so, is it consistent with the original narrative. If a unique event occurred can it be reconstructed? Are there residua of the unique event? At times there can be a controversy regarding admissible evidence, or even the interpretation of it. As the Noah Flood Story is a past event the interface of it and one’s understanding of science, philosophy, and religion becomes pertinent.

Oller states that for a narrative to be considered a TNR all three criteria must be fulfilled. He then goes on to contrast the TNR with progressively more degenerate forms which he identifies as fiction, error, and lies.²⁴ In fiction the object(s) and context(s) of the story are

²⁴ Oller, J.W., "Milestones in Impaired and Unimpaired First Language Acquisition," *CTW-Congress* (2005). <http://www.ctw-congress.de/scripts/abs-view/abstract.php?id=7476&day=17&kid=23>. Accessed 8/20/2005.

imaginary; i.e. not an eye witness physical object(s) and/or context(s). With error there is no intention to mislead the reader, the object(s) may be real but miss-identified (or not exist), and the understanding of its or their connection (i.e. interaction within a space/time continuum) is incorrect. With lies the objects are knowingly fabricated, the time/space constructs made up, all of this with the intention to misrepresent the story.

In fiction, errors, and lies the reenactment of the narrative is not able to be confirmed. For example, in the story of Huck Finn the object, i.e. the raft is imagined (not real) but is placed within a logical time/space context (**Figure 3**). But the actuality of it simply did not happen. The author presented it as fiction. In an error, the object is mistaken or imagined, and the time/space continuum is not what it appears to be. Oller used the example of an object on the road thought to be a squirrel, which turned out to be a piece of cardboard upon closer examination. The object was mistaken by the observer-he was in error. The time/space context of the squirrel crossing the road was incorrect as well. If he, the observer, had not subsequently recognized the cardboard for what it was then his narrative of the event would have been in error. In the final most degenerate form- a lie, all three structures are flawed- purposefully. Oller used the Clinton/Lewinsky Affair as an example. He (Clinton) purposefully misrepresented the facts and their context, which then led to a misunderstood narrative of it.²⁵

²⁵ Ibid. Oller.

Fictions, errors, and lies all must derive from a TNR,²⁶ but are degenerate forms of it.²⁷

However, a TNR cannot remain a TNR if any portion of it is or becomes untrue. Oller used the movie *Forrest Gump* for this situation. The Viet Nam War did occur, a TNR, and President Kennedy was President during part of it, a TNR. However, *Forrest Gump* meeting the President is not a TNR because he (Forrest) never existed. Thus, if one presented the story as a fact then it would be a lie. If one thought it true then it would be an error. But if one knew it not to be true and used it as a simple imaginary story then it would become a fiction.

In the present coursework, the structure of the TNR will be used to analyze the Noah flood account. Does the story contain realistic objects—are they items that the reader can recognize? Are the events connected in a plausible time sequence- can the reader follow the story from moment to moment? Since it was probably a single event – is it possible to find residual evidence of it in the earth? Can it be partially reconstructed using present know physical laws? To be classified as a TNR these questions must be affirmatively answered.

²⁶ Oller, J.W., *Theory of Technologically Assisted Language Learning/Instruction* (1996), 25-26.

²⁷ Fables, legends, myths, and sagas must also all fit into one of the categories of fiction, lie, or error. 1) A fable is a story of fiction to enforce a point, but may be told as a lie (i.e. purposefully misleading). Aesop's fables are an example of enforcing a point, e.g. animals speak moralistic sayings. 2) A legend is a remarkable and popular story, handed down, which may have been based in an historical event, but which can not be verified. The story surrounding El Cid of Spain is an example of a legend. 3) A myth tends to be religious in content but is based in a story of fiction. The story regarding Europa being carried to Crete by Zeus in the form of a bull and then having children by him to populate it would fit into this category. A saga relates to heroic figures, and was used initially in Norway. Information from: *A Common-School Dictionary of the English Language*, Noah Webster (abridged 1867) by W.G. Webster and W.A. Wheeler, Ivison, Blakeman, Taylor and Co., N.Y. and Chicago; and Webster's Ninth New Collegiate Dictionary (1988) Merriam-Webster Inc. Publishers, Springfield, MA. Also used: Seyffert, O. (1995) *The Dictionary of Classical Mythology, Religion, Literature, and Art*, Portland House, N.Y.; and Wikipedia.org on fable, legend, myth, and saga.

In the section on Determinancy nouns, adjectives, and modifiers etc. will be analyzed for the consistency in the writing of narratives—does it use identifiable objects?

Connectedness will involve literary structure analysis such as the use of the palistropic, geneologic inclusio, purposeful textual discontinuity, verb tenses reflecting time sequencing, and contemporary discourse analysis. Unity of structure vs. fragmentary composition of Genesis will be looked at; in regards to the flood story. In the section on Generalizability flood impact analysis will be assessed by reviewing the scientific fields of anthropology, biology, geology, chemistry, and archeology; but only as it relates to the topic at hand, and will use the testimony of experts in these areas.

The entire body of information from the sections on Determinancy, Connectedness, and Generalizability will be used to assess whether the Noah Flood Account meets the criteria of a TNR or whether is it more consistent with one of the more degenerate forms- fiction, error, or lie.

See Volume 2 for Figures
Methods

THE STORY OF THE FLOOD IN THE BIBLE**GENESIS V:28- IX:19**²⁸**Chapter V**

VS 28: And Lamech lived a hundred and eighty-two years, and

VS 29: begot a son. And he called his name Noah saying: This one will comfort us, from our labor, and from the toil of our hands, from the ground, which Jehovah cursed.

VS 30: And Lamech lived, after he begot Noah, five hundred and

VS 31: ninety-five years, and begot sons and daughters. And all the days of Lamech were seven hundred and seventy-seven years; and he died.

VS 32: And Noah was five hundred years old. And Noah begot Shem, Ham, and Japheth.

Chapter VI

VS 1: And it came to pass, that men began to be numerous on the face of the ground, and daughters were born to them.

VS 2: And the sons of God saw the daughters of men, that they were fair; and they took for themselves wives of all whom they chose.

VS 3: And Jehovah said: My Spirit shall not forever strive with man, in their erring. He is flesh; and his days shall be a hundred and twenty years. VS 4: The men of violence were in the earth in those days. And also after the sons of God came in unto the daughters of

²⁸ Moses, "Genesis," in *The Bible Common Version Revised*, (New York, NY: American Bible Union, 1868), 26-39. This volume had a commentary by T.J. Conant.

men, they bore children to them. These were the mighty men, who of old were the men of renown.

VS 5: And Jehovah saw that the evil of man was great in the earth; and every device of the thoughts of his heart was

VS 6: only evil, all the day. And Jehovah repented that he made man on the earth, and he was grieved at his heart.

VS 7: And Jehovah said: I will wipe off man, whom I created, from the face of the ground; from man to cattle, to reptile, and to the fowls of heaven; for I repent that I made them.

VS 8: But Noah found favor in the eyes of Jehovah.

VS 9: These are the generations of Noah. Noah was a just man; perfect was he in his generations; Noah walked with

VS 10: God. And Noah begot three sons, Shem, Ham, and Japheth.

VS 11: And the earth was corrupt before God; and the

VS 12: earth was filled with violence. And God saw the earth and behold, it was corrupted; for all flesh had corrupted its way upon the earth.

VS 13: And God said to Noah: The end of all flesh is come before me; for the earth is filled with violence through them; and behold I will destroy them with the earth.

VS 14: Make thee an ark of cypress wood. With cells shalt thou make the ark, and shalt pitch it within and without with

VS 15: pitch. And this is what thou shalt make it; three hundred cubits shall be the length of the ark, fifty cubits its breadth,

VS 16: and thirty cubits its height. Light shalt thou make for the ark; and to a cubit shalt thou finish it above; and the door of the ark shalt thou set in the side thereof; with lower, second, and third stories shalt thou make it.

VS 17: And I, behold I bring the flood of waters upon the earth, to destroy all flesh, wherein is the breath of life, from under the heavens. All that is in the earth shall expire.

VS 18: And I establish my covenant with thee; and thou shalt come into the ark, thou, and thy sons, and thy wife and the

VS 19 wives of thy sons, with thee. And of all the living of all flesh, two of all shalt thou bring into the ark, to keep alive

VS 20: with thee; a male and a female shall they be. Of the fowl after its kind, and of cattle after their kind, and of every reptile of the ground after its kind, two of all shall come to

VS 21: thee, to keep them alive. And do thou take to thee of all food that may be eaten, and thou shalt gather it to thee; and it shall be to thee and to them for food.

VS 22: And Noah did it. According to all that God commanded him, so did he.

Chapter VII

VS 1: And Jehovah said to Noah: Come thou, and all thy house, into the ark; for thee have I seen righteous before

VS 2: me in this generation. Of all clean cattle thou shalt take to thee seven of each, a male and his mate; and of cattle

VS 3: that are not clean two, a male and his mate; also of the fowls of heaven seven of each, male and female; to keep

VS 4: seed alive on the face of all the earth. For yet seven days, and I will cause it to rain upon the earth forty days and forty nights; and every being that I made will I wipe off from the face of the ground.

VS 5: And Noah did according to all that Jehovah commanded him.

VS 6 And Noah was six hundred years old, when the flood of

VS 7: waters was upon the earth. And Noah went in , and his sons, and his wife and the wives of his sons, with him, be-

VS 8: cause of the waters of the flood. Of the clean cattle, and of cattle that are not clean, and of the fowl, and all that

VS 9: moves upon the ground, there went in two of each to Noah into the ark, a male and a female, as God commanded Noah.

VS 10: And it came to pass, after the seven days, that the waters

VS 11: of the flood were upon the earth. In the six hundredth year of Noah's life, in the second month, on the seventeenth day of the month, on that day were all the fountains of the great abyss broken up, and the windows of the heavens

VS12: were opened. And the heavy rain was upon the earth forty

VS 13: days and forty nights. On the selfsame day entered Noah, and Shem, and Ham, and Japheth, sons of Noah, and the wife of Noah, and the three wives of his sons with them,

VS 14: into the ark; they, and every living thing after its kind, and all the cattle after their kind, and every reptile that creeps on the earth after its kind, and every fowl after its

VS 15: kind, every bird of every sort. And they went in to Noah into the ark, two of each, of all flesh wherein is the breath

VS 16: of life. And they that went in, went in a male and a female of all flesh, as God commanded him. And Jehovah closed up after him.

VS 17: And the flood was forty days upon the earth; and the waters increased, and bore up the ark, and it rose up from

VS 18: the earth. And the waters prevailed, and increased mightily upon the earth; and the ark went upon the face of the waters.

VS 19: And the waters prevailed mightily, mightily, upon the earth; and all the high mountains, that are under the

VS 20 whole heavens, were covered. Fifteen cubits upward did the waters prevail; and the mountains were covered.

VS 21: And all flesh expired that moved upon the earth, of fowl, and of cattle, and of beast, and of every creeping thing that

VS22: creeps upon the earth, and every man. All in whose nostrils was the breath of a spirit of life, of all that was on the

VS 23: dry land, died. And every being was wiped off, which was upon the face of the ground, from man to cattle, to reptile, and to the fowl of the heavens; and they were wiped off from the earth, and there remained only Noah, and they that were with him in the ark.

VS 24: And the waters prevailed upon the earth a hundred and fifty days.

Chapter VIII

VS 1: And God remembered Noah, and every living thing, and all the cattle that were with him in the ark; and God caused a wind to pass over the earth, and the waters subsided.

VS 2: And the fountains of the abyss and the windows of heaven were closed, and the heavy rain from heaven was restrained.

VS 3: And the waters returned from off the earth continually; and the waters abated from the end of a hundred and fifty days.

VS 4: And the ark rested in the seventh month, on the seventeenth day of the month, on the mountains of Ararat.

VS 5: And the waters were abating continually until the tenth month. In the tenth, on the first of the month, were the mountains seen.

VS 6: And it came to pass at the end of forty days, that Noah

VS 7: opened the window of the ark which he made. And he sent forth the raven; and he went forth, going forth and returning, until the drying up of the waters from off the earth.

VS 8: And he sent forth the dove from him, to see if the waters

VS 9: were lightened from off the face of the ground. And the dove found not a resting-place for the sole of her foot, and she returned to him into the ark; for the waters were on the face of all the earth. And he put forth his hand, and took her, and brought her in to him into the ark.

VS 10: And he waited yet another seven days; and again he sent

VS 11: forth the dove from the ark. And the dove came in to him at evening; and lo, in her mouth an olive-leaf plucked off! And Noah knew that the waters were lightened from off the earth.

VS 12: And he waited yet another seven days, and sent forth the dove; and she returned to him no more.

VS 13: And it came to pass in the six hundred and first year, in the first month, on the first of the month, that the waters were dried up from off the earth. And Noah removed the covering of the ark, and saw, and behold the face of the

VS 14: ground was dry. And in the second month, on the seven and twentieth day of the month, was the earth dried.

VS 15,16 : And God spoke to Noah , saying: Go forth from the ark, thou, and thy wife, and thy sons, and the wives of thy sons,

VS 17: with thee. Every living thing that is with thee, of all flesh, of fowl, and of cattle, and of every reptile that creeps upon the earth, bring forth with thee, that they may breed abundantly in the earth, and be fruitful, and multiply on the earth.

VS 18: And Noah went forth, and his sons, and his wife, and the

VS 19: wives of his sons, with him. Every living thing, every reptile, every fowl, all that moves upon the earth, after their families, went forth from the ark.

VS 20: And Noah built an altar to Jehovah. And he took of all clean cattle, and of every clean fowl, and offered burnt-offerings

VS 21: on the altar. And Jehovah smelled the sweet odor. And Jehovah said in his heart: I will not again curse the ground on account of man, for the device of the heart of man is evil from his youth; and I will not again smite

VS 22: every living thing, as I have done. During all the days of the earth, sowing and reaping, and cold and heat, and summer and winter, and day and night, shall not cease.

Chapter IX

VS 1: And God blessed Noah and his sons; and he said to

VS 2: them: Be fruitful, and multiply, and fill the earth. And the fear of you, and the dread of you, shall be upon every beast of the earth, and upon every fowl of the heavens, upon all with which the ground teems, and upon all the fishes of

VS 3: the sea; into your hand are they given. Every moving thing that lives, to you shall it be for food; as the green

VS 4: herb have I given you all. But flesh with its life, its blood, ye shall not eat.

VS 5: But also your blood of your lives will I require; at the hand of every beast will I require it, and at the hand of man; at the hand of each one's brother will I require the

VS 6: life of man. He that sheds the blood of man, by man shall his blood be shed; for in the image of God made he man.

VS 7: And you, be ye fruitful, and multiply; and bring forth abundantly in the earth, and multiply therein.

VS 8: And God spoke to Noah, and to his sons with him, saying:

VS 9: And I, behold, I establish my covenant with you, and

VS 10: with your seed after you; and with every living being that is with you, of the fowl, of the cattle, and of every beast of the earth with you; of all that go forth from the ark of

VS 11: every beast of the earth. And I establish my covenant with you; and all flesh shall not again be cut off by the waters of a flood, and there shall not again be a flood to destroy the earth.

VS 12: And God said: This is a sign of the covenant which I make between me and you, and every living being that is

VS 13: with you, for perpetual generations. My bow I set in the cloud, and it shall be for a covenant-sign between me and

VS 14: the earth. And it shall come to pass, when I bring a cloud over the earth, that the bow shall be seen in the cloud.

VS 15: And I will remember my covenant, which is between me and you, and every living being of all flesh; and the waters

VS 16: shall no more become a flood to destroy all flesh. And the bow shall be in the cloud; and I will see it, to remember the perpetual covenant between God and every living being

VS 17: of all flesh that is upon the earth. And God said to Noah: This is a sign of the covenant which I establish between me and all flesh that is upon the earth.

VS 18: And the sons of Noah, who went forth from the ark, were Shem, and Ham, and Japheth. And Ham was the father of Canaan.

VS 19: These were the three sons of Noah; and from these was the whole earth overspread.”

A Brief Overview of the Narrative Structure of the Noah Flood Account

The Noah Flood Account meets the criteria for a narrative story using the criteria listed below (see also Methods Section).

Qualities that qualify it as a narrative include:

- 1.) It is written in the third person as regards Noah using “him, he, his”. But in regards to God it is written in the first person using “I, My”. It is implied that the recorder of the story is quoting God.
- 2.) There is a specific person in the story—Noah, his sons Shem, Ham, Japheth and their wives. As well, Noah’s lineage is given.
- 3.) Even though the story is written in the third person there are descriptions within it that impress upon the reader that Noah had recorded (by whatever means) the event. For example, the exact quotes of what God said to him, the exact dimensions of the ark, the exact days of the event, the names of his children, the events of sending forth the raven and then the dove and his reaching out his arm to let the dove land on it—all speak to Noah himself having recorded what happened.
- 4.) There is a very specific time sequencing (which will be discussed more later), but the years, months, and days of the flood story are very precise. Noah’s age is mentioned.
- 5.) It tells a story of why the flood was sent. It describes the preparation for it beforehand by Noah. It then portrays the onset/duration/resolution of the flood

waters. Finally, it concludes with the impact of the flood on the lives of Noah, his family and animals.

- 6.) It portrays a pronounced effect upon the earth by the flood. Prior to the flood there was a mist that watered the earth, during the flood rain fell from the heavens and the earth broke open to flood the earth, and post flood there were clouds, a rainbow, and seasons. This correlates with the time sequencing of the story.
- 7.) The Noah flood story was viewed as a narrative event by all the writers of the Bible who mentioned it. Throughout the ages Bible scholars have considered it a narrative event although a few have considered it more of a myth (see below for further discussion).

While the Noah Flood Account meets the criteria for a narrative—does it meet properties of a True Narrative Representation? Is it an actual eye witness account? This dissertation will address that question.

HISTORICAL BACKGROUND REGARDING THE NOACHIAN FLOOD
ACCOUNT AND MAN'S VIEW OF IT

The Noah Flood Account and similar stories are known in virtually every culture, people, race, and group of mankind.^{29,30,31} Yet its historicity and moral/ethical meanings have been questioned throughout much of history³² and are hotly contested or simply dismissed today. Science has often been used as a veneer to obscure the issues surrounding the implications of its authenticity.^{33,34} It has remained at the center of such

²⁹ A. Rehwinkel, *The Flood* (St. Louis, MS: C, 1951, reprint 1978), 127-152.

³⁰ H. Clark, *Fossils, Flood, and Fire* (Escondido, CA: Outdoor Publishing, 1968), 45-50.

³¹ J. Fairholme, *A General View of the Geology of Scripture* (London: James Ridgway, 1833), chapter 6 entitled "Traditions of the Deluge." He lists peoples such as the Egyptians, Greek, Chinese, Hindoo (his spelling present day would be Hindu), Otaheite (Tahiti), Cubans, Peruvians, Brazilians, Mexicans, and the Iroquois Indians of North America.

³² Even the Apostle Peter had to address this as mentioned in his epistle 2 Peter 3:3-8.

³³ Cohn presented a secular view of the development of a counter-argument to the concept of a Noah worldwide flood. He stated, "From about 1770 onwards the six-thousand-year began to be reinterpreted. Educated people noted that Moses had written the account of the Creation for the benefit of the uneducated; so it was quite in order to interpret it allegorically, with each day of the six days converted into an epoch of indeterminate but vast duration. Moreover, those epochs could be seen as making up the history of the earth before the appearance of mankind. The seventh day could be allotted to human history... Buffon's famous *Epoques de la Nature* (1778) shows how such a reinterpretation could affect ideas about the flood... his private estimates, as the manuscript shows, were revised upwards from 3,000,000 to 10,000,000 [years for the age of the earth]. Mankind, however, had only emerged some six to eight thousand years ago, somewhere in Central Asia. And the lot of those early beings was utterly wretched. Naked in mind and body, defenseless against the elements, they underwent calamities which left an indelible mark on human consciousness. These included local inundations, which were transformed in the memory into a universal catastrophe. Not that there were no universal deluges—only, the last of these had occurred some 35,000 years before mankind came into existence. Set in such a context, the biblical Flood was reduced to the status of a minor episode, a mishap too commonplace to be singled out for special mention.... In the writings of the Scottish geologist James Hutton (1726-97) the Flood fares even worse.... The earth is portrayed as a self-regulating, self-renewing machine.... He closed his book, *Theory of the Earth*, with the saying, '... we find no vestige of a beginning- no prospect of an end.' It is equally clear that no place at all is left for the Flood. Hutton himself recognized as much- the buried shell-beds are explained as legacies not of the Flood but of subsidence and renewed uplift." N. Cohn, *Noah's Flood The Genesis Story in Western Thought* (New Haven: Yale University Press, 1996), 101-102.

³⁴ Morris has been blunt in his book regarding this (but well documents it), "An interesting hypothesis suggests another ulterior motive for discrediting Genesis and its record of the universal deluge: 'Liberalism was moving, and its method was to go after Biblical geology (specifically the Flood) in order

issues as the creation/evolution debate, and ethical debates regarding sin/judgment and relativism/absolutism.^{35,36,37} The current forms of the debate began approximately 200 years ago with the promotion and revitalization of certain ways of looking at earth history. Long ages for the earth displaced short. Catastrophic geology became unaccepted and uniformitarianism became vogue.³⁸ The unique creation of life was no longer unique but simply a progression from spontaneous development of life through increasingly complex stages of life forms—a concept throughout much of written history referred to as the Great Chain of Being.^{39, 40}

to disarm the Monarchists.' This was all in the immediate aftermath of the French Revolution, and the winds of revolutionary thought were blowing all over Europe at the time, including England: 'Paley's doctrine was required study in the universities, and was the received wisdom in society. There was only one way to reform Parliament, and that was to destroy Paley's Natural Theology- and the only way to do that was to discredit the catastrophist notions of its religious defenders who sought to reconcile the geological evidence with the story of Genesis . . . If the scientific evidence denied the truth of the Bible, then it also denied any connection between God and the Monarchy, thus freeing the Parliament and the people to redefine the political equations.' Thus uniformitarianism, with its slogan ('the present is the key to the past') was not deduced from the scientific evidence (which has always favored catastrophism), but was politically motivated, promoted by a handful of amateur geologists and liberal clergymen." H.M. Morris, *The Long War Against God* (Grand Rapids, MI: Baker House, 1991)100-101. He mentioned Charles Lyell and William Smith among others.

³⁵ Youngblood stated, "The Lord saw how great man's wickedness on the earth had become' in the days before the Flood (Gen.6:5), and He witnesses our evil actions and motivations today as well. At this very moment He 'Looks down from heaven on the sons of men to see if there are any who understand, any who seek God' (Ps.14:2)." R. Youngblood, *How It All Began* (Ventura, CA: Regal Books, 1980), 99.

³⁶ DeHaan mentioned the conditions that existed before the flood: over-production; pride; no thought of God; and the cohabitation, i.e. sexual immorality (with angels-his view). It is compared with the sins of Sodom and Gomorrah. M. DeHaan, *The Days of Noah, Booklet No. 5* (Grand Rapids, MI: Radio Bible Class, 1963) 1-32.

³⁷ N. Osanai, "Chapter 3: A Comparison of Ethics," in *Study of the Flood Account in the Gilgamesh Epic and Genesis*. www.aig.org/ (accessed June 14, 2010).

³⁸ T. Mortenson, *The Great Turning Point* (Green Forest, AR: Master Books, 2004).

³⁹ H.M. Morris, *The Long War Against God* (1991), 185. Morris commented that the concept being promoted was that, "living organisms can be arranged in a continuous linear scale, with man at the top and the simplest at the bottom. Below this are stones, metals, earth, water, air and ether. Above man are the higher worlds, angels, and finally God... As this Scala Naturae was understood in the sixteenth, seventeenth, and eighteenth century, it was not an evolutionary series but a static system, representing the mind of the eternal. However in no sense was it ever a biblical system for the Bible teaches plainly that each 'Kind' was quite distinct, clearly and permanently separated from other kinds."

⁴⁰ E. Clark, *Darwin: Before and After* (Exeter, England: Paternoster Press, 1960).

With the development of and the acceptance of the new (revitalized) ideas, attitudes changed regarding the Noah flood account. The concept of it having covered the whole earth, was now relegated to a local event, the last and insignificant of numerous flooding events, or even just a myth.^{41,42} Many talented theologians and some scientists rose to challenge these views.^{43,44,45,46,47} They recognized the underlying philosophic assumptions and the implications, which included a mechanistic (atomistic) self-

⁴¹ T. H. Huxley, *Science and the Hebrew Tradition* (New York: D. Appleton and Co, 1897), 234.

⁴² J. Pye Smith, *The Relation between the Holy Scriptures and Some Geological Science 5th Edition* (London: Henry Bonn, 1854). Though he appeared to be a Christian he did support long ages for the earth, and a local flood event.

⁴³ G. Young, *Scriptural Geology or an Essay on the High Antiquity Ascribed to the Organic Remains Imbedded in Stratified Rocks* (London: Simpkin, Marshall and Co, 1840).

⁴⁴ G. Fairholme, *A General View of the Geology of Scripture* (London: James Ridgway, 1833).

⁴⁵ J.H.B. De Saint Pierre, *Studies of Nature abridged. Containing a Vindication of Divine Providence; Derived from a Philosophic and Moral Survey of Nature and of Man* (Boston MA: J. Nancrede, 1801), 67, 68, and section 3. He argued for the cause of the flood being a tilt of the earth in which the polar caps melted and washed down the earth to kill all men except Noah. He considered the possibility of it being local but supported the concept of a worldwide flood. He was a prominent French scientist.

⁴⁶ This commentator addressed the significance of De Saint Pierre's views by contrasting them with Buffon's and Thomas Jefferson's. He stated, "Buffon, a French philosopher, of distinguished learning and great fame, but an opposer, and contemner of the sacred volume, conjectured that the earth is a fragment torn off from the sun; that, it being, at the period of its first dislodgement, a ball of solid fire, it must have took some thousands of years to cool it to such a degree as to render its surface habitable: consequently, that the earth, near the poles, had formerly a proper degree of warmth for elephants, rhinoceri and etc.;—and that in this way we may account for the skeletons of these animals being found in the polar regions... that a man of singular learning and talents has had recourse to such a wild theory to invalidate it [i.e. Noah's Flood]; - let every candid reader judge... A distinguished philosopher of our own country, Mr. Jefferson, has objected to the credibility of Moses's history of the deluge, on the grounds that it violates the established laws of nature; according to which, (in his opinion) water cannot be made to rise over the surface of the earth, to such an attitude as to cover even small hills, and much less mountains... On the other hand, Barnarden St. Pierre, a French author, who is no less celebrated for; philosophical disquisitions than Mr. Jefferson, has offered to the public a very ingenious theory, which (if true) seems to prove that the deluge was possible even on natural principles. W, "Documents Concerning the Existence of Noah's Flood," *The Balance, Columbian and Repository* 2, no. 9 (March 1, 1803):65.

⁴⁷ T. Mortenson, *The Great Turning Point*, 2004, listed Granville Penn, George Bugg, Andrew Ure, George Fairholme, John Murray, George Young, and William Rhind. He referred to them as the Scriptural Geologists.

perpetuating universe devoid of God.⁴⁸ But the new views swept through the European continent, then to the Americas.⁴⁹

These renewed views were greatly popularized with the production of Charles Lyell's book *Elements of Geology* in 1830-1833.⁵⁰ Widespread acceptance of the long age uniformitarian ideas became the common framework among geologists—even those of a Christian belief.^{51, 52, 53}

These concepts were expanded into and overlapped the biologic studies; and in 1859 reached a new pinnacle with the publication of the “Origin of the Species” (**Figure 1a, b**).⁵⁴ The supposed progression of fossil complexity was advocated to give a way of

⁴⁸ Ibid Morris, *The Long War Against God* (2000), 95.

⁴⁹ Most American geologists soon adopted the European views- see discussion below.

⁵⁰ On page 43-44 Lyell stated regarding the concept of the deluge, “An additional period of a century and a half was now destined to be consumed in exploding the hypothesis, that organized fossils had all been buried in the solid strata by the Noachian flood. Never did a theoretical fallacy, in any branch of science, interfere more seriously with accurate observation and the systematic classification of facts.” C. Lyell, *Principles of Geology* (London: John Murray, 1830-33), CD PLANET-E-TECH, and volume one (US printing by Hillard, Gray and Co., Boston 1842).

⁵¹ E. Hitchcock, *Elements of Geology* (New York: Mark H. Newman, 1845).

⁵² J. Dana, *Manual of Geology 3rd edition* (New York: Ivison, Blakeman, Tylor and Co, 1880). Dana appeared to have been a committed Christian yet he and many others such as E. Hitchcock, H. Miller, B. Silliman and A. Guyot took the position that the days of Genesis were each epochs of time. Guyot, in 1889, had considerable influence with his book: *Creation or the Biblical Cosmogony in the Light of Modern Science*, Charles Scribner's Sons, New York. As well, he propounded Laplace's nebular hypothesis. B. Silliman in his appendix to Bakewell's *Geology*, 1839, stated, “The divisions of time called days in the Genesis are not necessarily restricted to twenty four hours, but may be understood to be periods of indefinite length.”... “The period is not far distant, when all thinking and reasonable men who make themselves acquainted with the structure of the earth, will come to the conclusion that the formation and arrangement of the crust, as we now see it, must have occupied many ages.” Online: messiah.edu/HPAGES/FACSTAFF/TDAVIS/Silliman_selection.htm.

⁵³ Dana, as one of the prominent geologists and Christians of his day, carried much weight. He propounded the existence of God in this book and stated on page 14, “I believe the record to be a divine record” i.e. regarding the Bible. He stated that Egyptian, Babylonian, and Mosaic teaching converged in the distant past as the concept was not natural to man (page 10), and that the polytheistic Babylonian record was derived from the earlier monotheistic one (page 8). Yet, he thought the days of Genesis were periods of time- with 8 epical events in which to interpret things (page 22), and that Moses writings were limited by his grasp of the issues (page 21). He followed Guyot's thinking in these concepts (as mentioned above). J. D. Dana, *The Genesis of the Heavens and the Earth* (Hartford CT: The Student Publishing Co, 1890).

⁵⁴ C. Darwin, *Origin of the Species* (New York: Merrill and Baker, 1859; reprint 1900).

correlating the view of a slow sequential layering down of strata. M. Cuvier and others supported this view (**Figure 2a,b**).^{55,56} As well, the long ages proposed for the development of the strata was felt to give adequate time for the life forms represented in the fossils to evolve. It seemed to be an acceptable tautology to many.⁵⁷ While Charles Darwin was not the founder of this debate his book became the flash point around which proponents of these views rallied. Asa Gray promoted these views in America.⁵⁸

T.H. Huxley wrote vociferously on the ‘scientific evidence’ presented by Darwin, and did much writing to encourage the ‘decomposition of [Christian] orthodoxy’ (**Figure 3**).⁵⁹ He revealed the focus of his attack in a letter written April 25, 1889. He stated, “I have for some time the notion of dealing with the ‘three great myths’—1) Creation; 2) Fall [i.e. Adam and Eve]; and 3) Deluge.”⁶⁰

The broad sweeping paradigms of evolutionary thinking i.e. change as progressive advancement, reached into the linguistic circles as well. This dramatically affected Biblical scholarship.⁶¹ Astruc, 1753, wrote that Moses used 2 different sources for writing Genesis. Eichhorn, 1780, expanded this to the Pentateuch. DeWitte, 1805, implied a late date (after David) for its compilation; and that the writing of Deuteronomy

⁵⁵ M. Cuvier, *Discourse on the Revolutionary Upheaval on the Surface of the Globe* (Paris, 1825), online mal.bc.ca/~johnstoi/civier-e.htm. (accessed Aug 19,2002). He was responsible for the formulation and propagation of “progressive creation”. As well he set up the museum in Paris.

⁵⁶ C. Lyell, chapter "Determination of the Relative Ages of Rocks," in *Principles of Geology*, (London: John Murray, 1833).

⁵⁷ Read nicely pointed out the tautology in this short booklet. J. Read, *Fossils, Strata, and Evolution* (Culver City, NV: Scientific- Technical Presentations, 1979), 45-47.

⁵⁸ Gray stated, "Between the doctrines of this volume and those of the other great naturalist whose name adorns the title-page of this journal [Mr. Agassiz], the widest divergence appears." Louis Agassiz adamantly opposed Darwin. Gray, A, *Darwiniana*, ed. A.H Dupree (Cambridge, MA: Belknap Press of Harvard University Press, 1963), 9.

⁵⁹ T. Huxley, Abby Road, RA to N. Tallamey July 9th, 1859, private collection.

⁶⁰ T. Huxley, to Mr. Clodd. Online The Huxley File at:<http://www.alephO.clarku.edu/Huxley/letters/89.html>. (Accessed 2008)

⁶¹ D. Closson, *Did Moses Write the Pentateuch* (Richardson, TX), Probe Ministries, Online at: <http://www.leaderu.com/orgs/probe/docs/moses.html>. (access date 2009).

was politically motivated.⁶² Wellhausen, 1870's, was the most influential writer and popularized what has become known as the Documentary Hypothesis. In the preface to Wellhausen's *Prolegomena*, Smith stated, "The Old Testament does not furnish a history of Israel, though it supplies materials from which such a history can be constructed."⁶³ Wellhausen in his own book stated, "The great mass of the books of the Old Testament not only relate to the pre-exilic period but date from it...they are remnants of the literature of ancient Israel which the Jews rescued as a heritage from the past, and on which they continued to subsist in the decay of independent intellectual life." He felt that primitive documents were patched together by an editor into the Old Testament's present form. He rejected the idea that the Law was developed (much less given) early in the history of the Jewish people, and thought it arose out of their historical period at a later date.⁶⁴ This was strikingly different to the implications of the Pentateuch itself. With the stroke of a pen these writers pummeled the academic world of the mid to late 1800's with thoughts that the Jewish scriptures were hand me downs of fragments of history coalesced into a political format in the last years of nationhood. As such, per the writers, these stories had no real relevance to the current living, breathing world.

Thus a twisted cord of geologists, paleontologists/biologists, and theologians was formed. The geologists said a global flood did not occur, and if Noah's flood did occur, it was local and insignificant or not detectable. Budding new disciplines of paleontologists/biologists proclaimed that the fossil record, though incomplete, demonstrated that the earth had gone through numerous long lifecycles and a progressive (i.e. increasing complexity) development of life. Finally the theologians said that the primitive stories containing fragments of historical events had been compiled with increasing sophistication to make up the sacred writings. The Noah flood had become

⁶² G. Archer, *A Survey of the Old Testament* (Chicago: Moody Press, 1985), 83-108.

⁶³ J. Wellhausen, *Prolegomena to the History of Israel* (1883), Online at: Project Gutenberg (accessed 2008).

⁶⁴ W. Albright, introduction to *The Legends of Genesis*, by H. Gunkel (New York: Schocken Books, 1901).

innocuous to many. There were those who resisted but their voices were mostly drowned out.

In the same vein but more current, White in his book, *A History of the Warfare of Science with Christendom* stated, "...three men of extraordinary power John Wesley, Adam Clarke, and Richard Watson. All three were men of striking intellectual gifts, lofty character, and noble purpose...yet we find them in geology hopelessly fettered by the mere letter of scripture, and by a temporary phase in theology."⁶⁵ The modern attitude among many scientists such as Pennock and others remains (paraphrased), "if you want to believe that God did it, so be it, but modern science has shown there is no need for God now."⁶⁶ Most of these scientists would proclaim that the early chapters of Genesis were merely an evolutionary derivative from Mesopotamian stories, and not historical documents. For example, Vogel and Matulsky in their book *Human Genetics* (1982) display Durer's artwork of Adam and Eve as a frontise piece. They comment that this was the first mythical couple.⁶⁷

Best in his book the *Ziusudra Epic* (1999) summarized, "This is a reconstruction of a lost legend about Ziusudra (a Noah figure) who was king of the Sumerian city-state Shuruppak at the end of the Jemdut Nasr period about 2900 BC. A six day thunderstorm caused the Euphrates River to rise and flood Shuruppak and a few other cities in southern Sumer. The ark was a commercial river barge that was hauling grain, beer, and other cargo including a few hundred animals when the storm began. The runaway barge floated down the river into the Persian Gulf where it grounded at the mouth of the river. The flood myth is demythologized with emphasis on what was physically possible,

⁶⁵ A. White, "Chapter 5: From Genesis to Geology," in *A History of Warfare of Science with Theology in Christendom*, (New York: The Free Press, 1965), 175.

⁶⁶ R. Milner and V.Maestro ed., "Intelligent Design? Evolution Response to William A. Demski by Robert T. Pennock" *Natural History Magazine*, April, 2002, <http://www.actionbioscience.org/evolution/nhmag.html>. (accessed May 31st, 2009). Pennock stated, "The origin of species once seemed equally mysterious, but Darwin followed the clues given in nature to solve that mystery. One may, of course, retain religious faith in a designer who transcends natural processes, but there is no way to dust for his fingerprints."

⁶⁷ F. Vogel and A.G. Motulsky, *Human Genetics* (New York: Springer Verlag, 1979).

technologically practical, and consistent with archeological facts.”⁶⁸ Other secular geologists and anthropologists squabble as to whether the origins of the flood account originated from local flooding of the Black Sea versus Mesopotamia.^{69,70,71} One Assyriologist, Dalley, commented that the distribution of flood legends among virtually all cultures of the world was simply because of Christian proselytism and not the result of a common shared event.⁷²

As well, many modern Christian theologians have questioned the historical nature of the Flood, whether it was simply a local or a worldwide one.⁷³ Fretheim (1969) stated, “It was a common belief in the ancient Near East that in the dim recesses of the past, there was a catastrophic flood that wiped out the bulk of mankind. Such a point of view is impossible for us today; however; at least as far as the details of the flood story are concerned archeological evidence has failed to show that there has been anything approaching a worldwide flood. All that is possible to say is that some local disaster

⁶⁸ R. Best, *Noah's Ark and the Zuisudra Epic* (Fort Meyers, FL: Enlil Press, 1999), the abstract.

⁶⁹ This book was simply an extension of the Ryan and Pitman book to include some underwater exploration by R. Ballard. Both supported a Black Sea source for the flood story. See section on Generalizability for further discussion. I. Wilson, *Before the Flood* (New York: St. Martin's Press, 2001).

⁷⁰ Ryan, W. and Pitman, W., *Noah's Flood The New Scientific Discoveries About the Event that Changed History* (New York: Simon and Schuster, 1998).

⁷¹ S. Dalley, *Myths from Mesopotamia* (Oxford, England: Oxford University Press, 2000).

⁷² Ibid Dalley, *Myths*, 8.

⁷³ Plein's comments centered around the idea that the flood story must be reassessed in light of new scientific discoveries—that they determine what the Bible means. He said on pg. 12, “Yet just when the divorce between religion and science seemed to have been finalized and the unhappy couple taken residence in separate intellectual houses, with science settled deep in the valley of learning and religion pitched far away on Holy Hill, the jury brings in new findings that have forced the two back to the negotiating table. If one is to have more modest expectations about the biblical record than the obsessive Navarra [an explorer who claimed to have found part of the ark on Mt. Ararat] seems to have had, then the new theories will be heartening. They are not trying to force-fit the scientific findings into the straitjacket of biblical ‘truth.’ There is room for dialogue between science and belief in a place where Navarra only ran into dead ends. On that score, the work of Ryan and Pitman on the Black Sea flood can help hammer an opening through the wall that so often separates secular scientists from people of faith. ...If the Bible is going to be rescued from the clutches of myth, it would seem that an escape can be effected only in connection with good hydrological investigation.” In this he ignored the solid geologic research by the Institute for Creation Research and others....J. Plein, *When the Great Abyss Opened* (Oxford, England: Oxford University Press, 2003).

probably lies at the basis of the narrative. Among the many flood stories...one which bears some especially striking resemblance is the Babylonian Story Gilgamesh Epic. As the flood story (Bible) was told over the years it took two slightly different forms (P and J). These two different forms are now woven together into one.”⁷⁴ He echoed Wellhausen of the previous century.

The debate regarding the authenticity and historicity of the flood account is not new. It has been going on since the time of Jesus and before. Peter the Apostle said in 2 Peter 3:3-5, “First, you must understand this: In the last days people who follow their own desires will appear. These disrespectful people will ridicule God’s promise by saying, ‘What happened to his promise to return? Ever since our ancestors died everything continues as it did from the beginning of the world.’ They are deliberately ignoring one fact: Because of God’s word, heaven and earth existed a long time ago. The earth appeared out of water and was kept alive by water. Water also flooded and destroyed that world. By God’s word, the present heavens and earth are designated to be burned as a carpet. They are being kept until the day ungodly people will be judged and destroyed.”⁷⁵ It should be noted that Peter wrote this at a time when there was probably a much greater knowledge of the earth than in earlier times. There is some indication that the Romans had a sense of the global nature of the earth and this is depicted on some of their coins.⁷⁶

Morris documented the history of man’s struggle with God’s word in his book *The Long War against God*.⁷⁷ Some men do not want to admit to the existence of a ruling/judging (yet merciful) God. Julian Huxley stated “he (man) is not under the control or guidance

⁷⁴T. Fretheim, *Creation, Fall, and Flood* (Minneapolis, MN: Augsburg Publishing House, 1969).

⁷⁵ 2 Peter 3:3-5 NASB

⁷⁶ D. VanMeter, *The Handbook of Roman Coins* (Utica, New York: Laurion Press, 1992, reprint 2000). See the coin description for FORTVNA pg. 36. In this text see the section on Determinancy for a discussion on the words for earth and ground.

⁷⁷ The entire book is devoted to this subject. H.M. Morris *The Long War against God* (1991).

of any supernatural being or beings, but has to rely on himself and his own powers.”⁷⁸ Hoyle and Wickramasinghe were observant when they stated in 1983 that, “The evolutionary record leaks like a sieve. There are so many flaws in Darwinism that one can wonder why it swept so completely through the scientific world, and why it is so endemic today.” Their answer, “Undoubtedly, however, the biggest thing going for Darwinism was that it finally broke the tyranny in which Christianity had held the minds of men for so many centuries.”⁷⁹ That is, orthodoxy had finally been decomposed to use T. H. Huxley’s terms.

It is clear that more than science is involved when discussing the Noah Flood Account (and creation too). What is the history of that account, how have people looked at it through recorded history—as a story, in the modern vernacular a legend or myth, or did they consider it an historical account? What kind of meanings did they draw from it?

The earliest physical documents regarding flood stories, at present, do come from the Middle East.^{80,81,82,83,84} They are often fragmentary, and in some cases like the Epic of Gilgamesh (**Figure 4a**), are inserted into larger works. Others are a work unto themselves (**Figure 4b**). Thus, when counting original documents many times these includes sources

⁷⁸ J. Huxley, quoted in H. M. Morris, *That Their Words May Be Used Against Them* (El Cajon, CA: Institute for Creation Research, 1997) 32.

⁷⁹ F. Hoyle and C. Wickramasinghe, *Evolution from Space* (London: Granada, 1983), 145.

⁸⁰ J. Fairholme, *A General View of Geology of Scripture* (1833).

⁸¹ S. Dalley, *Myths from Mesopotamia* (2000), 1-153.

⁸² J. Pritchard, *The Ancient Near East Vol. 1* (Princeton, NJ: Princeton University Press, 1958, reprint 1992), Section 2 Myths and Epics from Mesopotamia.

⁸³ G. Smith, *The Chaldean Account of Genesis* (New York: Scribner, Armstrong and Co, 1876). He translated Assyrian cuneiform tablets and discovered that there were similarities and dissimilarities between the Chaldean and Biblical accounts of the flood. Note: In this early transliteration Hasisadra = Xisuthros (or Noah); Izdubar = Gilgamesh. See Appendix C as well.

⁸⁴ W.G. Lambert and A.R. Millard, *Atra-Hasis The Babylonian Story of the Flood* (Oxford, ENG: Clarendon Press, 1969).

that do not directly contain the flood subject but an associated text. Often translators will make a composite of several fragments. Nonetheless, texts have been found from the early 3rd millennium-Ziusudra Sumerian (Nippur); Gilgamesh Akkadian early 2nd millennium; Atra-Hasis during Ammisaduga's reign in Old Babylonian (written in Akkadian) early 2nd millennium; Utanapishta Assyrian 1st millennium (based on early sources); and from other areas and groups such as Ugarit; Megiddo; Hittite; Hurrian (epic of Gilgamesh copies); Etana Adapa from Tell Harmal and Tell el-Amarna. Ziusudra was translated by Berossus into Greek with the Noah figure being named Xisuthros. Other Greek sources include Prometheus; in Palestine there is a record with the figure named (uta)-naish(tia) thought to be an derivation of Noah's name. *Metamorphosis* which was written by Ovid included a flood story that described a local event that occurred in Phrygia. *Deucalion* (**Figure 5a**), another Greek story, and one written by Appollodorus 1st C. BC described what was probably a local Greek flood with the second story referring to one in Thessalonica. There was a work by Lucias of Samasota written in 2nd C. AD which described a local flood in Hierapolis. These may have included elements of a worldwide flood as well.⁸⁵ Fragments of the flood story, from about 200 B.C., of the Bible have been found at Qumran as well (**Figure 5b**). Thus it has been demonstrated, by retrieved written documents, that the flood story was present from the earliest times of mankind and up to present.

That most of these derive from a common source is generally accepted.⁸⁶ Most include God (or gods); his anger with men (and their sin); judgment by a flood to destroy all men and living things; and one man with his family finding favor with God (or gods). Before the flood the man was instructed to build a boat to save himself and his family, and to take some animals to be saved with him. Post-flood the boat landed on a mountain. The

⁸⁵ There are components in these stories that are consistent with a massive flood story as well. The earth needed repopulating after the flood. This was accomplished by Deucalion and Phryia casting stones over their heads. As will be seen many flood stories may compound a story of a massive or worldwide flood with that of a more local one. J.G Frazer, *Folk-Lore in the Old Testament* (London: Macmillan and Co, 1923), 66-67.

⁸⁶ J. Bergman, "Do Creation and Flood Myths Found Worldwide Have a Common Origin," in *The 5th International Conference on Creationism*, ed. R.L. Levy Jr. (Pittsburgh, PA: Creation Science Fellowship, 2003).

man once leaving the boat performed a sacrifice of thanksgiving to God or god(s). These common themes are found in stories throughout the earth.^{87,88,89}

But in analyzing the Noah flood text in comparison with others, it is in many ways strikingly different.^{90,91,92} It is monotheistic. Most, if not all others, are not monotheistic. God is shown to be a righteous holy lawgiver in the Bible. In other texts the god(s) are capricious; angry because man made too much noise (Atrahasis, Gilgamesh). These other texts contain elements of confabulation: a god cutting another god in half with rivers flowing from the halves, the boat being a cube (the Noah ark or boat is of floatable dimensions). Kikawada stated that with Biblical stories population growth was a blessing, but with Atrahasis and other non-biblical ones the population was seen as something to control.⁹³

That the Noah flood account was available to other groups of people besides the Jews at the same time as other flood stories is apparent. Plato 400 B.C. who studied cultures while traveling through the biblical lands, would have had exposure to the Jewish scriptures.⁹⁴ It is felt that some of his writings contain Jewish elements of the scriptures,

⁸⁷ Ibid J. Bergman "Do Creation and Flood Myths have a Common Origin" (2003).

⁸⁸ A. Cattcott, *A Treatise on the Deluge* (London: E.Allen, 1768).

⁸⁹ J. Fairholme, *A General View of Geology of Scripture* (1833).

⁹⁰ A. Heidel, *The Gilgamesh Epic and Old Testament Parallels* (Chicago, IL: University of Chicago Press, 1969), 225-6.

⁹¹ P. Bartz, "A Critical Examination of Man's Traditions of Creation and Genesis," in *2nd International Conference on Creationism*, ed. R.E. Walsh (Pittsburg, PA: Creation Science Fellowship Inc, 1990), 27-30.

⁹² C. Wilson, *In the Beginning God* (Mt Waverly, Victoria, Australia: Word of Truth Productions Inc,), 90-94.

⁹³ I. M. Kikawada and A. Quinn, *Before Abraham Was* (Nashville, TN: Abingdon Press, 1985), 38,80.

⁹⁴ W.S. Sahakian, *History of Philosophy* (New York: Barnes and Noble Books, Haroer and Row, 1968), 52.

and that he impacted some later Christian writers.⁹⁵ But there is little evidence that he deviated from the Greek thinking in that he probably viewed the Noah flood account as local similar to the stories of Deucalion and Pyrrha, and Nereus.⁹⁶ Yet Barossus, from Babylon, who wrote about Xisuthros in 200-300 BC did mention it.⁹⁷ He lived among a large Jewish population which had been compiling the books of the Bible. The historians of Alexander the Great would have had exposure in their conquests. As well, the Egyptians, certainly from the time of Solomon (and probably even from the times of Joseph) would have had opportunity to review the Jewish scripture or precursors of it. The Persian Empire would have had exposure when it extended into Egypt. Josephus states that Hieronymus the Egyptian, Mnaseas and many more including Nicolaus of Damascus referred to it.⁹⁸ The Romans certainly had exposure. Yet Lucretius, 100 BC, continued the atomist views (a mechanical evolution of the universe from atomic particles with no mention of a worldwide flood or a creator).⁹⁹ Tacitus the Roman historian wrote regarding the origins of the Jews; they were “detested by the gods” and were driven out of Egypt. He further stated, “This worship, however introduced, is upheld by its antiquity; all their other customs, which are at once perverse and disgusting, owe their strength to their very badness.”¹⁰⁰

⁹⁵ D. Allen, *Philosophy for Understanding Theology* (Atlanta: John Knox Press, 1985), 65.

⁹⁶ Plato when discussing the flood only referred to the Deucalion flood story; a local event with some similarities to the Noah flood account. See Critias in the Persus Digital Library Project online: perseus.tufts.edu. Searched 5/5/09.

⁹⁷ F. Josephus, *Josephus Complete Works*, trans. W. Whiston (Grand Rapids: Kregel Publications, 1960, 12th printing 1974, originally about 100 A.D.), 28.

⁹⁸ Ibid Josephus, *Josephus the Complete Works* (reprint 1960).

⁹⁹ Lucretius, *Lucretius On the Nature of the Universe*, trans. R.E. Latham (Rome; reprint Middlesex ENG: Penguin, 100BC, translation 1951, reprint 1985).

¹⁰⁰ A fuller text reads as follows, “4. Moyses, wishing to secure for the future his authority over the nation, gave them a form of worship, opposed to all that is practiced by other men. Things sacred with us, with them have no sanctity, while they allow what with us is forbidden. In their holy place they have consecrated an image of the animal by whose guidance they found deliverance from their long and thirsty wanderings. [It may be the golden calf which had long time ago been done away with.] They slay the ram seemingly in derision of Hammon [The supreme god of the Carthaginians. Wikipedia on Baal], and they sacrifice the ox, because the Egyptians worship it as Apis... 5. This worship, however introduced, is upheld by its antiquity; all their other customs, which are at once perverse and disgusting, owe their strength to their very badness. The most degraded out of other races, scorning their national beliefs, brought to them their contributions and presents. This augmented the wealth of the Jews, as also did the fact, that among

Clearly, the Jewish scriptures and culture were at odds with other cultures even before the times of Jesus. It does not appear that the Noah flood account, was accepted by many of these other cultures as indicated in their earliest records. Robert Bradshaw quoted Theophilus of Antioch as rejecting Plato's argument for a local Noachian flood. He also claimed that Deucalion is the Greek derivation of Noah – Gk. Deute “come” and kaleo “I call”. That Noah called people to repentance = Deucalion.¹⁰¹ However there are substantial differences between the Biblical account and the Deucalion one. In the later, as mentioned before, the earth was repopulated after the flood by Deucalion and Pyrrah as they cast stones over their shoulder.¹⁰² The Noah flood story does not have this mythical quality.

Among the early Jewish scholars it was thought that Moses compiled the account, that Noah was a real person, and the flood was universal.¹⁰³ That the Biblical writers considered Noah a real person is demonstrated by the fact that he is listed in the genealogy of I Chronicles by Isaiah who quoted God as saying, “For this is like the days of Noah to Me,” (54:9); and by Ezekiel as a real man (14:14). The Dead Sea Scrolls (100 BC–100 AD) include several fragments of the flood account – 4Q252-254a which discussed the sons of Noah and length of the flood; and the size of the ark. 4Q370 is a

themselves they are inflexibly honest and ever ready to shew compassion, though they regard the rest of mankind with all the hatred of enemies... Those who come over to their religion adopt the practice, and have this lesson first instilled into them, to despise all gods, to disown their country, and set at nought parents, children, and brethren... It is a crime among them to kill any newly-born infant. They hold that the souls of all who perish in battle or by the hands of the executioner are immortal... the Jews have a purely mental conceptions of Deity, as one in essence. They call those profane who make representations of God in human shape out perishable materials... They believe that Being to be supreme and eternal, neither capable of representation, nor of decay... This flattery is not paid to their kings, nor this honour to our Emperors... the Jewish religion is tasteless and mean.” He also accused them of believing in immortality, which is consistent with the Biblical record. Tacitus, *Complete Works of Tacitus*, trans. J. C. John and W. J. Brodribb (Rome, translation New York: Random House, and translation 1942, originally 100 A.D.).

¹⁰¹ R.I Bradshaw, *Creationism and the Early Church* (UK: by the author, 1999), Chapter 6, http://www.robibrad.demon.co.uk/contents_pf.htm.

¹⁰² J. G. Frazer (1923) 66-67.

¹⁰³ "In Rabbinical Literature: When he was four hundred and eighty years old all the righteous sons of men were dead, except Methuselah and Noah himself." *JewishEncyclopedia*, (1910 ed.), s.v. "Noah, Flood." <http://www.jewishencyclopedia.com/> (accessed January 1, 2010).

homily on the flood. 4Q422 is another commentary on the flood.¹⁰⁴ [See Figure 5b for an image of 1Q19 and Appendix C,D.] As mentioned before, Josephus (37-100 AD) wrote of an historical Noah in his *Antiquities*. Philo (20 BC-50 AD) propounded Noah as a real person.¹⁰⁵ Yet this does not seem to have been carried forward as a literal event in secular Jewish thinking, nor was it taken seriously by many in the earlier Jewish culture as evidenced by the writings of the book of Ezekiel.¹⁰⁶

Among the early church fathers the relevance of the early chapters of Genesis was debated.¹⁰⁷ Many generally accepted the historicity of it, but amplified it to have more of an allegorical importance. They did not seem to contend with the Greek atomists except for a few of those like Theophilus of Antioch. Maximus of Turin (408 AD) emphasized the 40 days of flooding as a baptism removing the wickedness of sinners and preserving Noah who was righteous. In a similar fashion sinners can now be cleansed by the “celestial rain of mercy”. Chrysostom (400 AD) taught a literal deluge where “everything was annihilated along with the human race.” Jerome (350 AD) compared the size/structure of the ark with the “mystical significance of numbers.” Augustine (400 AD) noted that man (except Noah) and the world were destroyed because of wickedness, but goes on to compare the ark as a symbol of Jesus Christ.¹⁰⁸

¹⁰⁴ M. Wise, M. Abegg, and E. Cook, *Dead Sea Scrolls* (San Francisco: Harper Collins, 1996), 330,391.

¹⁰⁵ Translator C.D. Yonge, *The Works of Philo* (Peabody, Mass: Hendrickson Publishing, 1993), 58. Philo certainly referred to Noah as a real person and expounded that he was a virtuous man.

¹⁰⁶ Ezekiel 14:12-14 says, “The word of the Lord came again to me, saying, Son of man, when the land sinneth against me by trespassing grievously, then will I stretch out mine hand upon it, and will break the staff of the bread thereof, and will send famine upon it, and will cut off man and beast from it: Though these three men, Noah, Daniel, and Job, were in it, they should deliver *but* their own souls by their righteousness, saith the Lord God.” (KJV) The context of this scripture was God dealing with the rebellion of the Jewish people in Ezekiel. The implication was that the people were ignoring the message of Noah.

¹⁰⁷ A. Louth, ed., *Ancient Christian Commentary on Scripture Old Testament 1*, vol. 1, *Genesis 1-11* (Downers Grove, IL: InterVarsity Press, 2001), 126-150.

¹⁰⁸ *Ibid*, *Ancient Christian Commentary on Scripture, Genesis*, 131.

Jewish writings have tended to fill in many practical or moralistic details not directly discussed in the scriptures.¹⁰⁹ Noah was considered a real person. The *Midrash Agadah* commented that the name Noah, meaning “rest”, was given once he had invented agricultural instruments for tilling the ground cursed with thorns and thistles. In the *Sefer ha-Yashen* his name has been interpreted as the “comforter.” In constructing the ark in the *Sefer Non*, “he learned how to build it, and mastered as well various sciences.” In the *Sefer Razi’el* it said, “Noah purposely worked slowly (52 years), in the hope that people would take warning therefore and would repent.” To distinguish between clean and unclean animals; the clean bowed and the unclean did not according to the *Sefer Ha Yashar*. The flood lasted twelve months during which Noah stayed awake the whole time in the ark—feeding and cleaning as reported in the Tanhuma. The ark landed on the mountain “Lubar”—*Sefer Noa*. There are numerous writings that chastise Noah for his drunken behavior, not praying for those who perished, and introducing slavery, e.g. Tanhuma. A current application of the moral impact of the Noah story is encapsulated in the Naohide Laws. These are suppose to apply to all mankind Jew and non-Jew: 1) establish courts of justice and rule of law; 2) prohibit idolatry; 3) prohibit blasphemy; 4) prohibit sexual immorality; 5) prohibit bloodshed; 6) prohibit theft; and 7) prohibit tearing a limb from a living animal.¹¹⁰

Noah has been mentioned in the Koran and Arabic literature, “as one of the six principle prophets sent to reclaim mankind from its wickedness.”¹¹¹ In Sura 11:27-50, Noah was sent to admonish people to turn from sin. He was mocked by the people and challenged to bring on the judgment if he is correct. Then, Noah was said to have stated that God will do as He pleases. Noah built an ark. He, his family and seventy others entered it. Floodwaters covered the earth and people outside were drown in judgment- including a

¹⁰⁹ J. McCurdy, “Noah” online in Jewish Encyclopedia.com. (Accessed online 2008).

¹¹⁰ B. Artson rabbi, “God of the Jews God Humanity” Online: My Jewish Learning.com

¹¹¹ Muhammad, *The Koran* (Arabia: Arabic, 600 AD; repr., London: Phoenix, 2003), Sura 11:27-51.

son of his. After remission of the water, He left the ark with his family, and made a sacrifice to God. God pronounced peace upon him.¹¹²

During the Middle Ages, philosopher/theologians continued to allegorize the account dwelling on moral lessons to be extracted from it. As well there was much speculation on the landing site—at least six.¹¹³ Common of the times, biblical plays incorporated the story and it was portrayed and paraded through the streets of communities.¹¹⁴ Few writers dwelt on evidence for the flood.

Per Dr. Young, a current Christian geologist and local flood advocate, the majority of medieval thinkers did not think of the flood in historical terms. An exception to this was Michael Glyca, 12th Century, who believed that fossils were remnants of the flood.¹¹⁵ The majority of others felt that evaluating the physical structure of the earth for historical evidence was unnecessary—as the scriptures were self-explanatory. However, the atomist mechanistic view of origins (propounded by the Greeks) continued to be supported by those such as Jea Birida and Nicolas of Oresme, 12-13th Century. Young commented further that, “all of which is to say that medieval attitudes toward creation were not generally conducive to the kinds of discovery that would lead to reevaluation of the flood narrative.”¹¹⁶

This was to be challenged due to exploration of the “new worlds”, i.e. 1400-1500’s, with new and varied animals and remote cultures that already had flood legends similar to

¹¹² It should be noted that Mohammed was known to have studied the Bible, and even called Christians “people of the book,” and probably derived some of his concepts from it- the Bible. As well, because of the large Jewish population and school in Iraq throughout much of history other Arabic writers had access to the writings of the Bible.

¹¹³ D.A Young, *The Biblical Flood* (Grand Rapids, MI: W.B. Eerdmans, 1995), 31-46.

¹¹⁴ “The Middle Ages” Online: Learner.com (Accessed 2009).

¹¹⁵ D.A. Young, *The Biblical Flood* (1995), 35.

¹¹⁶ Ibid, 36.

Noah's.¹¹⁷ Even with those issues the cosmographer Medina, in 1538, was comfortable with assigning his work within the Genesis account.¹¹⁸ The advent of the Renaissance would see the development of the scientific method, and philosopher/theologians like Bacon would begin to look at both the book of the scriptures and the book of nature. It should be noted that the scientific method, as a form of investigation, developed out of the philosophic framework of men "thinking God's thoughts after Him" as put forward by Kepler the great astronomer.¹¹⁹ Men who had a trust in the Christian scriptures developed virtually all of the foundational fields of modern empirical science,^{120,121} and many began placing the observations of the studies of the physical earth within the context of a global flood.¹²²

One of the most acute observers was Nicholas Steno. In *Prodromus*, 1668 (**Figure 6a-c**), he accurately surmised that strata were deposited out of aqueous slurries with the younger

¹¹⁷ Ibid, 47-64.

¹¹⁸ In the Introduction U. Lamb commented on page 23-25, "Medina's abstinence from judicial astrology, an art with which he was surely conversant, in favor of strict theological arguments wherever mathematics and observation did not serve, distinguish his cosmographic work from that of many of his contemporaries... These are probably the greatest advances made by the maestro: the classification of information, the creation of a consistent terminology, and the development of a frame of reference for any topic... Looking forward from Medina's position in history, one can see that though observation and record subjected to mathematical method advanced the development of nautical science, the keystone of Medina's system was still the world of Genesis. His argument against the moving earth [which secular scientists agreed with], no matter against whom it may have been directed, was still that the creation of man's universe was consistent with the account in Genesis of the six day's work (*Libro*, question 32). In addition to the limitation put upon scientific inquiry by the rigid framework of his universe, Medina allowed only one contradiction to cosmic law or observed fact- God's miraculous power." While this commentator does not understand the Christian faith, i.e. miracles do not necessarily violate scientific law (see section on science), she did acknowledge that Medina as a leading scientist of his day, who advanced the scientific method; and who also put his views within a Christian cosmological framework. P. de Medina, *A Navigator's Universe The Libro de Cosmographia of 1538* (Seville, Spain: Spanish Government, 1538; repr., Chicago: University Chicago Press, 1972).

¹¹⁹ J. Kepler, "Harmonies of the Worlds," in *Great Books*, ed. W. Benton (Chicago: Encyclopedia Britannica, 1990), 181-182; 1009-1085.

¹²⁰ J. G. Leslie, *Defending the Faith in the Last Days* (Gallup, NM: self publish, 2000).

¹²¹ M. M. Morris, *The Biblical Basis for Modern Science* (Grand Rapids, MI: Baker Book House, 1984, ninth 1991), Appendix 1.

¹²² B. Nelson, *The Deluge Story in Stone* (Minneapolis, MN: Augsburg Publishing House, 1931).

layering on top of the older- this in reference to sequencing.¹²³ He correctly associated a recently dissected shark tooth with that of fossil ones, and put this within the context of the Noah flood account. As well, he postulated how fossils formed from the dead animals and plants left behind from the flood. In his observations he also characterized the basic shapes of crystals. He thus laid the foundational groundwork for the sciences of stratigraphy, crystallography, and fossilization.¹²⁴

Some scientists during this period still held on to non-flood formation of fossils. Beringer, 1726, is a curious transition in this time. He was duped into accepting carved clay forms, placed in the dirt by duplicitous colleagues, as natural findings. He attributed them as possibly the creation of God through the flood, or “petrifying moisture and salts of the earth”, “seminal and plastic influences of some subterranean Archaeus or Panspermia or a generative vapor” (harking back to Aristotle’s petrifying virtues), “or finally from the vagaries of Nature”. Then he wondered “whether our present stones are the work of art” (**Figure 7a-d**). Sadly, he did not adequately recognize the artificial nature of them.¹²⁵

Hobbs, in 1715, seemed to argue in a similar vein with spontaneous generation of organisms within the earth. He rejected the flood.¹²⁶

Other scientists such as Scheuchizer, in 1727, did recognize fossils for what they were and in his tome regarding the history of the Bible he included many drawings of true

¹²³ This is now probably not always correct as it has been shown experimentally that multiply layers can form simultaneously-see section in Generalizability on sedimentation and stratification.

¹²⁴ N. Steno, *The Prodromus of Nicolaus Steno's Dissertation*, trans. J. G. Winter (London: The Macmillan Company, 1916).

¹²⁵ J.B.A. Beringer, *The Lying Stones of Dr. Johann Bartholomew Adam Beringer being his Lithographiae Wirceburgensis*, trans. M. E. Jahn and D. J. Woolf (Berkeley, CA: University of California Press, 1963).

¹²⁶ W. Hobbs, *The Earth Generated and Anatomized*, ed. R. Porter (Ithaca, NY: Cornell University Press, 1981) pg. 35.

fossils (**Figure 8a-d**), and attributed them to the result of the flood.¹²⁷ His figures were very accurate.

Thomas Burnet's work, in 1691, on the flood had a profound impact. He argued for a "perfect" shaped earth (somewhat like a spherical egg) that during the flood cracked and was overflowed, "dissolute(d)" and was now as it appeared in its fallen state (**Figure 9**).¹²⁸

Woodward followed and amplified Steno's work in 1695.¹²⁹ Whiston, in 1696, attempted to explain the cause of the deluge with the close approximation of a comet and the resultant tilt of the earth.¹³⁰ Catcott, in 1761, in his classic work divided his defense of a worldwide flood into three parts: 1) geophysical, 2) scriptural, and 3) anthropologic. He accurately surmised, where others did not, that the mountains had at one time been level plains (**Figure 10a-c**).¹³¹

Yet the debate regarding the flood was only one facet of a generalized questioning of the authenticity and relevancy of the scriptures that was occurring between the times of 1600-1800 A.D. The intellectual community was moving into a more humanistic and naturalistic philosophical framework. Philosophers at the forefront included Kant, Rousseau, Voltaire, Descartes, Spinoza, and Hume.^{132,133} Among the theologians a

¹²⁷ J.J. Scheuchzer, *Physica Sacra 3 volumes* (Zurich, 1731-33). He has been considered the founder of paleobiology and of European paleontology. See online: www.chlt.org/sandbox/lhl/dsb/page.54.a.php. Accessed 6/2/09.

¹²⁸ T. Burnet, *The Sacred Theory of the Earth* (London: R. Norton, 1691; repr., Carbondale, IL: Southern Illinois University Press, 1965).

¹²⁹ J. Woodward, *An Essay towards a Natural History of the Earth* (London: A. Bettsworth and W. Taylor, 1695). Available online: Google books.com Accessed 6/2/09.

¹³⁰ W. Whiston, *A New Theory of the Earth* (London: R. Roberts for B. Tooke, 1696; repr., New York: Arno Press, 1978).

¹³¹ A. Catcott, *A Treatise on the Deluge* (London: E. Allen, 1768, 2nd ed).

¹³² This author gives a Christian perspective to these events. T. Mortenson, *The Great Turning Point* (2004).

classic debate which carried a heavier weight, was whether “revealed” or “natural” religion was more trustworthy. This was exemplified by the debate between Coynebeare and Tindal in the mid 1700’s.^{134,135} As well, critical (skeptical) analysis of the scriptures, especially of Genesis had begun to develop.¹³⁶

The trend towards humanistic, mechanistic thinking impacted the early stages of the field of geology. In attempting to explain in mechanistic terms the origins of the earth practitioners became divided on the primary causes of the formation of the earth’s crust. Carpenter called them Plutonian (advocates of igneous magma) and Neptunian (promoters of sedimentary processes) as the primary cause.¹³⁷ Mortenson has referred to them as Vulcanists and Neptunists.¹³⁸

Werner in the late 1700’s advocated the Neptunian view in which sediments precipitated out of a slowly receding ocean, the dissolution based on changing mineral content.¹³⁹ Cuvier, the pre-eminent paleontologist/anatomist of his time, argued for a long age progressive creation of life, and this would later be echoed by L. Agassiz (See **Figure 11a,b**).^{140,141}

¹³³ He gives a secular perspective to these events. W. Durant, *The Story of Philosophy* (Garden City, NY: Garden City Publishing Co., Inc, 1926).

¹³⁴ J. Coynebeare, *Defence of Reveal'd Religion* (London: S. Wilmot, 1732).

¹³⁵ M. Tindal, *Christianity as Old as the Creation or Republication of the Religion of Nature* (Newburgh: David Denniston, 1730, reprint 1798).

¹³⁶ See section on Connectedness regarding the history of the development of the Documentary Hypothesis.

¹³⁷ W. Carpenter, *Scripture Natural History* (London: Book Society for Promoting Religious Knowledge, 1836), 4.

¹³⁸ T. Mortensen, *The Great Turning Point* (2004), pg. 27-33.

¹³⁹ "The basic concept of Wernerian geology was the belief in an all encompassing ocean that gradually receded to its present location while precipitating or depositing virtually all the rocks and minerals in the Earth's crust." *Wikipedia*, "Abraham Gottlob Werner," http://en.wikipedia.org/wiki/Abraham_Werner (accessed 11/14/09).

¹⁴⁰ M. le Baron Cuvier, *Discourse on the Revolutionary Upheavals on the Surface of the Globe* (France reprint English 1825, 1812), page----, <http://www.mala.bc.ca/~johnstoi/cuvier3.htm>. (Accessed on August 19, 2002).

Hutton, in 1785-88, argued that it was primarily volcanic activity. He then proposed a cyclical process, occurring over long ages of time, of sequential erosion, sedimentation, volcanic activity, and earthquakes. The residue matter would flow into the oceans, settle out, and then these areas in time would rise and undergo the previous processing.^{142, 143} This kind of argument has become what is called “uniformitarianism”.¹⁴⁴

¹⁴¹ L. Agassiz and A.A. Gould, *Principles of Zoology* (Boston: Gould and Lincoln, 1866). It will be stated later in this dissertation that Agassiz opposed evolutionary doctrine his entire life. However he did accept the concept of sequential special creation of animals.

¹⁴² A quote by Hutton found in Wikipedia; "The solid parts of the present land appear in general, to have been composed of the productions of the sea, and of other materials similar to those now found upon the shores. Hence we find reason to conclude: 1st, that the land on which we rest is not simple and original, but that it is a composition, and had been formed by the operation of second causes. 2nd, that before the present land was made, there had subsisted a world composed of sea and land, in which were tides and currents, with such operations at the bottom of the sea as now take place. And, lastly that while the present land was forming at the bottom of the ocean, the former land maintained plants and animals; at least the sea was then inhabited by animals, in a similar manner as it is at present. Hence we are to conclude, that the greater part of our land, if not the whole had been produced by operations natural to this globe; but that in order to make this land a permanent body, resisting the operations of the waters, two things had been required; 1st, The consolidation of masses formed by collections of loose or incoherent materials; 2ndly, The elevation of those consolidated masses from the bottom of the sea, the place where they were collected, to the stations in which they now remain above the level of the sea." This has become the basis for the dogma of the historical uniformitarian geology view. *Wikipedia*, "James Hutton," http://en.wikipedia.org/wiki/pedia/James_Hutton/ (accessed 11/14/09).

¹⁴³ Hutton, in 1788, stated, "This is the view in which we are now to examine the globe; to see if there be, in the constitution of this world, a reproductive operation, by which a ruined constitution may be again repaired, and a duration or stability thus procured to the machine, considered as a world sustaining plants and animals. If no such reproductive power, or reforming operation, after due enquiry, is to be found in the constitution of this world, we should have reason to conclude, that the system of this earth has either been intentionally made imperfect, or has not been the work of infinite power and wisdom." J. Hutton, *Theory of the Earth or an Investigation of the Laws observable in the Composition, Dissolution, and Restoration of Land upon the Globe* (Edinburgh: Transactions of the Royal Society of Edinburgh, 1788; repr., Sioux Falls, ID: NuVision Publishers, LLC, 2007), 15 (page references are to the reprint edition). On the same page he also talked about the “immense time necessarily required for this total destruction of the land.”

While Hutton makes some vague references to a divine wisdom and plan he makes no reference to the Bible or to the possible impact of a flood such as the one described in Genesis regarding Noah.

¹⁴⁴ The term “uniformitarianism” was first coined by William Whewell. See Wikipedia on “Uniformitarianism”. However, Hutton played a prominent role in its conception.

Whitehurst also argued for uniformitarianism, and the idea of a second flood event (the first being at creation) began to be set aside.^{145,146} With the publication of Lyell's work¹⁴⁷ the scientific revolution, begun in the cradle of Christian philosophy, had again swung into a mechanical (Greek atomist) system, and long ages for the earth replaced short ages; catastrophic geology was replaced by uniformitarianism. Subsequently, the unique creation of life was replaced by the Great Chain of Being¹⁴⁸ in what would become known as the evolution of life. Mechanistic geology and biology with skeptical theology would work hand in glove to present an old concept in a new dressing. The Noah flood account would become to many irrelevant—either as a local event or legend or myth, or even as a national lie to promote the heritage of a certain group of people.¹⁴⁹

Christians would embrace the debate on various levels. Some geologists and others said the flood was local and that animal and plant life developed (was “created”) progressively over long periods of time [Pye Smith¹⁵⁰ (**Figure 12a**), Buckland,^{151,152}

¹⁴⁵ J. Whitehurst, *An Inquiry into the Original State and Formation of the Earth* (London: W.Bent, 1786; repr., New York: Arno Press, 1978).

¹⁴⁶ The reviewer discussed Whithurst's proposition that the current state of the earth is due to "unalterable laws of gravity, fluidity, and centrifugal force." Because of its "oblate spherical" form constrained by the "immutable laws of nature" it has thus been that shape "throughout all ages of the world." He was said to have argued that the earth began in a fluid state, "chaotic", which was also "heterogeneous". It was then, "progressively formed into a habitable world." Lesser dense matter was separated from the more dense particles: air, water, and earth. As the partitioning continued air became cleaner, the sun shone through, and the water covered the earth. Tides occurred as earthy matter unequally coalesced (resulting in island formation). He, Whitehurst, commented on, "the improbability of a second universal flood." This would refer to the Noachian one. The review does not discuss Whitehurst's views on organic life. But he, the reviewer, concluded with, "we must acknowledge that he [Whitehurst] has extended not a little the bounds of rational theory in those abstract observations." "An Inquiry into the Original State and Formation of the Earth; deduced from Facts and the Laws of Nature," review of *An Inquiry into the Original State and Formation of the Earth*, by Whitehurst, J, *The Critical Review* XLVI, 1778, 367-372.

¹⁴⁷ C. Lyell, *Principles of Geology* (1830-33).

¹⁴⁸ Morris, *The Long War Against God* (1991) 185-187.

¹⁴⁹ There has been much distain regarding the historicity of the Jewish scriptures due to the obvious political implications of claims by ancient possession to “The Land.”

¹⁵⁰ J. Pye Smith, *Geology and the Holy Scriptures* (London: Henry G. Bohn, 1854).

¹⁵¹ W. Buckland, *Geology and Mineralogy* (London: William Pickering, 1837), 16. On pg. 16 he stated, “Several hypotheses have been proposed, with a view of reconciling the phenomena of Geology,

Silliman,¹⁵³ Dawson,¹⁵⁴ and others]. Carpenter, a biologist, talked about the close approximation of a comet (similar to Whiston) with the pulling of the tides and a massive ingress/egress of the seas which caused an event of large flooding and strata formation over the various land masses of the earth.¹⁵⁵ It appears that he accepted that the strata left

with the brief account of creation which we find in the Mosaic narrative. Some have attempted to ascribe the formation of all the stratified rocks to the effects of the Mosaic Deluge; an opinion which is irreconcilable with the enormous thickness and almost infinite subdivisions of these strata, and with the numerous and regular successions which they contain of the remains of animals and vegetables, differing more and more widely from existing species, as the strata in which we find them are placed at greater depths. The fact that a large proportion of these remains belong to extinct species, that lived and multiplied and died on or near the spots where they are now found, shows that the strata in which they occur were deposited slowly and gradually, during long periods of time, and at widely distant intervals. These extinct animals and vegetables could therefore have formed no part of the creation with which we are immediately connected.”

¹⁵² Prior to writing his Bridgewater Treatise volumes Buckland supported a universal deluge. In the dedication to the Lord Bishop of Durham he stated, "It has [his results], already, produced conclusions, which throw new light on a period of much obscurity in the physical history of our globe, leads us to hope, that it will no longer be asserted, as it has been by high authorities, that geology supplies no proofs of an event in the reality of which the truth of the Mosaic records is so materially involved." On page 225 he stated, "In the works of Catcott, Jones, and Hutchinson, a mass of strong evidence is brought forward to show the agency of diluvial currents in excavating valleys, over large portions of the surface of this island [England]. And M. Cuvier, in his Essay on the Theory of the Earth, expresses his conviction, that if there be any one fact thoroughly established by geological investigations, it is that of the low antiquity of the present surface of the earth, and the circumstance of its having been overwhelmed at no very distant period by the waters of a transient deluge; and although Voltaire may have indulged himself in denying the possibility of such an event, and Linnaeus have overlooked its evidences, the discoveries of modern geology, founded on the accurate observation of natural phenomena, prove to demonstration, that there has been an universal inundation of the earth,..." W. Buckland, *Reliquiae Diluvianae* (London: John Murray, 1823; repr., New York: Arno Press, 1978). Unfortunately some of his data for this book could have been the result of post-flood action. This misunderstanding on his part may have led to his acceptance of a localized Noah flood later on.

¹⁵³ On pg. 5 of the online article Silliman stated, "The period is not far distant, when all thinking and reasonable men who make themselves acquainted with the structure of the earth, will come to the conclusion that the formation and arrangement of the crust, as we now see it, must have occupied many ages." B. Silliman, *Appendix to Bakewell's Geology 3rd American ed. from the 5th London ed.* (New Haven: B. and W. Noyes, 1839), www.messiah.edu/HPAGES/FACSTAFF/TDAVIS/Silliman_selection.htm

¹⁵⁴ Dawson stated, " The laws of creation actually illustrated by this primeval animal (Foraminifers) are only these: First, that there has been a progress in creation from few, low, and generalized types of life to more numerous, higher, and more specialized types; and secondly, that every type, low or high, was introduced at first in its best and highest form, and was, as a type, subject to degeneracy, and to partial or total replacement by higher types subsequently introduced." It should be noted that he rejected that there was any evidence for spontaneous generation. J.W Dawson, *The Story of the Earth and Man* (New York: John B. Alden, 1873), 21-23.

¹⁵⁵ Carpenter, *Scriptural Natural History* (1836), 7-15. He seemed to accept a universal deluge but that it occurred as the comet approached the earth, and the depths of the earth broke open causing immense washing of water over the various land masses removing soil from one spot and depositing it in another

by the Noah flood was a partial reworking of previous strata, and thus while he accepted a worldwide flood it would only account for some of the stratigraphic layers of the earth. It appears that he was an early advocate of what would become the Day/Age Theory.

There were, however, a few that would mention it was universal and the strata reflected the Noah flood (the “scriptural geologists”: Young¹⁵⁶ (**Figure 12b**), Murray¹⁵⁷,

with resultant stratification. But he did not seem to consider the earth as one original land mass, and that previous strata existed prior to the flood. On page 7 he begins, "We now proceed to notice the desolations, changes, and new formations which the universal **Deluge effectuated on the surface and upper strata of the earth**. Of the event itself, we are assured beyond the possibility of a doubt. We have no difficulty in demonstrating it, except from a superabundance of proof. It is asserted, both by sacred and profane historians, how disguised and disfigured so ever the latter accounts may be. Plutarch, in his book on the industry of animals, mentions both the ark and the dove. The account Ovid has given of the flood, in the reign of a surnamed Deucalion, which drowned all Thessalia, and from which the king and his wife were saved on Mount Parnassus, seems to be a confused tradition between the deluge of Noah and a partial inundation. **The deluge not only covered both these mountains, but has left stratifications on all the higher mountains, as far as the snow will allow us to ascend... The physical cause is attributed by Dr. Halley, and two or three other astronomers, to the near approach of a comet** towards the earth, which, Mr. Whiston thinks, descended on the plane of the elliptical... The elder rabins, mostly followed by the Christian fathers, commenting on those words of Moses, 'The fountains of the great deep were broken up,' supposed an eruption of latent waters, which covered the earth's surface to the elevation of the mountains... **the flux and reflux of prodigious tides, seem the only theory on which the students of Nature can account for the stratification of the earth**... The Mosaic history of the deluge has been carefully examined by Lightfoot, who equaled the rabins in Hebrew literature. The whole period, according to him, comprised a solar year... The changes and ravages of Nature correspond with the impetuous force of the flood. Travelers and geologists are all agreed, that, in every continent and island, the mountains, the hills, the declivities, are, in places without number, left desolated of earth, craggy and bare... It is therefore apparent, that whatever earths the impetuous tides of the deluge washed from one place, they must of necessity deposit in another... These long-continued actions and deposits of the water are a sure guide in accounting for all the conformations and heterogenous masses found in most of the alluvial earth... This idea, that the deeper alluvial strata were laid on by the increasing tides, assists to account for the deposit of coal... In this manner, so far the tremendous operations of the deluge can be traced, in the short space of two leagues, fifty or sixty beds of coal were laid on between Burslem and Mowcop, an immense treasure for future times. The number of tides which rolled against this primitive mountain, between the arrival of each flotilla.... It is, however, to be remarked, that much of the matter laid on by the deluge, as rocks, flint, and minerals being already formed, are the detritas of former strata, not liable to change... The investigations of the latest and most accurate philosophers have afforded proof, little short of demonstration, that the earth, at least in its present form, cannot have existed longer than appears from the Mosaic account." (He quoted a Mr. Farber that the days of Genesis "were periods of vast but uncertain length...")

¹⁵⁶ On pg. 9-10 in response Pye Smith and others Young commented that there is not a progression of simple to complex fossil types in the layers of strata; and that organisms of various ecologic habitats did not die in the strata where they were found but were mixed and washed in together. G. Young (1840).

¹⁵⁷ Murray commented on some geologic anomalies but also discussed the prevalence of flood stories, similar to the Noah one, in other distant societies such as the Hindi (pg.223), the common derivation of some languages (pg.226), and coins such as those found in Apamea that have the image of Noah on them—as being supportive of a real flood event. J. Murray, *The Truth of Revelation*

Fairholme¹⁵⁸, Penn,¹⁵⁹ Bugg¹⁶⁰, and DeSaintPierre¹⁶¹). Other Christian scientists, in the late 1800's, would continue to correlate the long age concepts of the Uniformitarians with the Bible in what has been called the Day Age Theory. Each of the Genesis creation days would represent an epoch of time and the geologic strata, with fossils, were posited within several of those long periods without any reference to The Flood.^{162, 163}

The corollary of a progressive evolution of life received impetus from the promotion of the views of developmental long age strata formation.

Yet prominent biologists/paleontologists such as Agassiz (**Figure 13**)¹⁶⁴ and Owen¹⁶⁵ would argue and present evidence against Darwin's ideas (even though they accepted

Demonstrated by an Appeal to Existing Monuments, Sculptures, Gems, Coins, and Medals (London: William Smith, 1840).

¹⁵⁸ See Fairholme, G. 1833.

¹⁵⁹ T. Mortenson, *The Great Turning Point* (2004), 71-75.

¹⁶⁰ T. Mortenson *The Great Turning Point* (2004), 88-96.

¹⁶¹ DeSaintPierre argued that the universal flood was caused by a tilt of the earth which melted the poles, raised the waters, which washing down the mountainsides and covered the earth. The poles then refroze. J.H DeSaintPierre, *Studies of Nature abridged* (Boston: J. Nancrede, 1801), 27-111.

¹⁶² Guyot had considerable influence among God-fearing people of his day with his views on the creation of the world and the life on it. He echoed Francis Bacon when he stated on page 7, "Thus we shall be convinced, if I do not greatly err, that the two books (the Bible and nature), coming from the same Author, do not oppose, but complete one another, forming together the whole revelation of God to Man." He propounded Laplace's Nebular Hypothesis for the creation of the earth, and then supported the long sequential ages for the fossils found in the strata. On page 99 he stated, " These strata preserve in their folds the archives of the creation of organized beings, living at the time of their deposition, whose innumerable remains fill their rocky shelves and reveal to the geologist the order of appearance of the various tribes of plants and animals, thus enabling him to reconstruct the history of the life system, through all its gradual changes, from its earliest beginning to the present time." He placed this comment within the 5th "Cosmogonic Day" out of seven. A. Guyot, *Creation or The Biblical Cosmogony in the Light of Modern Science* (New York: Charles Scribner's Sons, 1889).

¹⁶³ Dana, who from his writings appeared to be a committed Christian, supported and referred to Guyot, page 18-19, in his book on Genesis. He went on to comment on page 22 that, " The creative works (i.e. days of creation in Genesis) mark off grand epochs in creation's history." He also made an important observation that monotheism was not a natural thought to man, and that the polytheism of Babylon was probably derived from an earlier monotheistic concept (pages 8-10). J.D Dana, *The Genesis of the Heavens and the Earth* (Hartford, CN: The Student Publishing Co, 1890).

¹⁶⁴ This article appeared shortly after Agassiz's death. Throughout his life he adamantly opposed Darwinian evolution. He did support created types, and modification within groups. In argument to Darwin's transmutation theory he stated," The truth is, our domesticated animals, with all their breeds and

long ages for the earth). Others such as Gray (a botanist)¹⁶⁶ would promote it. Theologians such as Rendell¹⁶⁷ would call the flood a myth or legend and spiritually allegorize it. Green¹⁶⁸ would demonstrate the fragmentary and conflicting structure of the Documentary Hypothesis. (See an outline of his critique in later sections of this work.) Yet while the majority of the intellectual community would embrace Lyell, Darwin, and Wellhausen many of the grassroots Christian community did not. Debates flowed through local churches¹⁶⁹ and even onto the national level, i.e. Scopes Trial,¹⁷⁰ and would continue to flare.

That debate rages today within most of the same dynamic philosophic frameworks that have been present for 200 years. New technologies such as DNA sequencing have been used to support Darwin¹⁷¹ and to oppose his ideas.¹⁷² Radiometric dating has been used to

varieties, have never been traced back to anything but their own species, nor have artificial varieties, so far as we know, failed to revert to the wild stock when left to themselves. Darwin's works and those of his followers have added nothing new to our previous knowledge concerning the origin of man and his associates in domestic life, the horse, the cow...." L. Agassiz, "Evolution and Permanence of Type," *The Atlantic Monthly*, no. 33 (1874).

¹⁶⁵ In his lecture 4 of May 9th 1837 Owen stated, "The doctrine of Transmutation of forms during the Embryonal phases, is closely allied to that still more objectionable one, the transmutation of species." Owen, R, *The Hunterian Lectures in Comparative Anatomy*, ed. P.R Sloan (Chicago: University of Chicago Press, 1992).

¹⁶⁶ A.H Dupree, *Asa Gray* (NY, NY: Atheneum, 1968).

¹⁶⁷ On page 255 of his work Rendell stated, "Doubtless the Lord said, 'As the days of Noe were... But the 'ark' and 'flood' mentioned in this passage are no proof that they were natural things. To regard them as representing spiritual things, pertaining to the mind, answers all the purposes of the argument they are introduced in the gospel to sustain." E.D Rendell, *The Antediluvian History* (London: E. Pitman, 1850).

¹⁶⁸ W. Green, *Unity of the Book of Genesis* Charles Scribner's Sons, 1895; repr., Grand Rapids: Baker Book House, 1979).

¹⁶⁹ B. Burton, stenography, ed., *A Debate between W.L. Oliphant and Charles Smith* (Cincinnati: F. L. Rowe Publisher, 1929).

¹⁷⁰ G. F. Herrick and J. O. Herrick, *The Life of William Jennings Bryan* (USA: Grover C. Buxton, 1925).

¹⁷¹ Collins, director of the Human Genome Project, stated on pg. 99 of his book, "No serious biologist today doubts the theory of evolution to explain the marvelous complexity and diversity of life." F. S. Collins, *The Language of God* (New York, 2006).

¹⁷² Sanford, a retired Cornell University Professor in Botany, had this to say on pg. 151 of his book, "What is the mystery of the genome? Its very existence is its mystery. Information and complexity which surpass human understanding are programmed into a space smaller than an invisible speck

bolster long ages for the earth¹⁷³ and also to tear those ages down.¹⁷⁴ Archeology has been used to argue in support of the Bible¹⁷⁵ and also it has been used to attempt to refute the historicity of it.¹⁷⁶ New texts and new types of analysis have either supported the idea of the coherence of Genesis and thus of a historical flood¹⁷⁷ while others have still adhered to arrangements of the Documentary Hypothesis to relegate it to the form of a legend,^{178,179} and the Noah flood to a local event.¹⁸⁰ The real question is as Colson said, “Who speaks for God?”¹⁸¹ What is the correct view of the Genesis flood account? What did the writer of the story intend to portray? This present research will attempt to address whether it, the Noah flood story, meets the criteria of a True Narrative Representation. If it does so this, would be supportive of the narrative representing a true eye witness account of the event—that the man Noah saw and experienced the event that he wrote about.

of dust. Mutation/selection cannot even begin to explain this. It should be very clear that our genome could not have arisen spontaneously. The only reasonable alternative to a spontaneous genome is a genome which arose by design." J. C. Sanford, *Genetic Entropy and the Mystery of the Genome* (New York: Ivan Press, 2005).

¹⁷³ R. C. Wiens, *Radiometric Dating A Christian Perspective* (American Scientific Affiliation, 1994, revised 2002), 1-26, <http://www.asa3.org/aSA/resources/Wiens.html>.

¹⁷⁴ L. Vardiman, A.A. Snelling and E.F.Chaffin, eds., *Radioisotopes and the Age of the Earth*, 2 vols. (El Cajon CA, St. Joseph, MO, Chino Valley, AZ: Institute for Creation Research and Creation Research Society, 2000,2005).

¹⁷⁵ K. A. Kitchen, *On the Reliability of the Old Testament* (Grand Rapids, MI: William B. Eerdmans Publishing Company, 2003).

¹⁷⁶ I. Finkelstein and N. A. Silberman, *The Bible Unearthed* (New York: Simon and Schuster, 2001).

¹⁷⁷ Wenham,G.(1994) The Coherence of the Flood Narrative in I Studied Inscriptions Before the Flood. Ed. R.Hess and D.TsumuraG.J Wenham, "The Coherence of the Flood Narrative," in I Studied Inscriptions from Before the Flood, (Winona Lake, IN: Eisenbrauns, 1994).

¹⁷⁸ E.A Speiser, *Genesis*, The Anchor Bible, ed. W. F. Albright and D.N. Freedman, vol. 1 (Garden City, New York: Doubleday and Company, Inc, 1964, third printing 1980).

¹⁷⁹ J. K. Hoffmeir, *Israel in Eygypt* (New York: Oxford University Press, 1996).

¹⁸⁰ Ross, a Christian by his profession, accepts the uniformitarian philosophy which by necessity results in a local flood framework in which to put scientific observations (see discussion section). H. Ross, *The Genesis Question Scientific Advances and the Accuracy of Genesis* (Colorado Springs: NavPress, 2001), 145-162.

¹⁸¹ Colson, C, *Who Speaks for God?* (Carol Stream, IL: Tyndale House Publishing, 1994).

**See Volume 2 Figures
Historical Background**

DETERMINANCY

INTRODUCTION

The first quality of the TNR is that of determinacy. Oller has defined it as; “the property of true narrative representations that enables the determination of the identity of objects, persons, and histories of experience and behavior: the foundational basis in true narrative representations that also enables the discovery of the pragmatic content of conventional linguistic signs.”¹⁸² As well, he stated that the linguistic terms used to describe an event are “motivated by the material facts of the episode as they are perceived by the narrator, and the linguistic representation determines those material facts in the sense of characterizing them and imparting meaning and relationship to them.”¹⁸³

Briggs refined this into a workable application in his archeology thesis by stating, “Through the perceptive and cognitive faculties of the narrator, the empirical particulars of the episode are mapped into language.”¹⁸⁴

A crucial aspect of a true narrative is that it involves someone, who had a time /space sensorial event; and who desires to express to others what he or she believes or perceives to have happened. The person can communicate by using body position, pointing, inflection, art, writing or verbal sounds. Words in a written form allow concepts and ideas to be transmitted from one time period to another.

The process of choosing particular words is founded in a system of linguistics where spoken utterances or written symbols are used as accepted by the community of communicators (or signers) as having accepted meanings. As members of this

¹⁸² J. Oller, *Milestones* (2006), 441.

¹⁸³ Ibid, Oller.

¹⁸⁴ P. Briggs, *Testing the Factuality of the Conquest of Ai Narrative in the Book of Joshua*. Trinity Southwest University Institute of Archeology and Biblical History Academic Monograph Series AMS/TSU AR.2 (Albuquerque, N.M.: Trinity Southwest University Press, 2001), 14.

community experience the time/space context of the physical world, images are framed in the short term memory as replicas of the real objects.¹⁸⁵ These are called Icons. But for an Icon to have relevance to communication it must be linked to some sort of application/interaction that reveals properties about it. This is called Indexing and involves more intermediate memory storage. From this a Surface Form, i.e. symbol that is a word and felt by some to be arbitrary in structure, becomes attached to represent the Icon and its properties of Indexing. This Surface Form tends to remain memorized more indefinitely. This is the foundation of Oller's language acquisition.¹⁸⁶ He gives the example of: the Icon, a specific lady's image, coupled with that she is a brunette, when she met someone else etc. as the Indexing, and that she is called Stacy the Surface Form (in which the actual lettering of the name reveals nothing about her, but by which as an assigned symbol would be recognizable if she was mentioned without be present in a conversation). Oller goes on to show that toddlers use this to acquire language in the presence of other language users. This seems to be what is implied in the garden when Adam names the animals.¹⁸⁷

¹⁸⁵ Levine divided the process of memorization into 3 systems: 1) Short Term Memory; 2) Active Working Memory; and 3) Long-term Memory. Within short term memory data is "stabilized", and used immediately or transferred to other memory systems. It is "registered" here. Active working memory takes data and combines it with other information. He described it as the "RAM" part of memory, and called it as having the "suspension" role-holding data while it is processed. Data can then be transferred from active working memory into long term memory in which there is "paired association storage", "category storage", and other functions. It requires recall. Its' role is "consolidation". M. D. Levine, "A System for Remembering the Memory Dysfunctions of Children and Adolescents," in *Phoenix Children Pediatric Update held in Phoenix, A. Z., February 23-26, 2004*, (Phoenix: Phoenix Children's Hospital, 2004), 70-85.

¹⁸⁶ Oller, *Milestones* (2006), 7-11.

¹⁸⁷ Gen. 2:19-20. The Hebrew *qara* means to cry out, call aloud; and *shem* means definite and conspicuous. WSOT and Strong. It should be noted that God was conversing with Adam and then also Eve. God would have to have given Adam at least a rudimentary understanding of language, upon which to subsequently build a vocabulary and lexicon. Some language scholars attempt to argue that primitive words simply developed from sound heard in nature such as 'caw caw' associated with a bird; or from oral-gestures. (George Yule: *The Study of Language*). But Dr. Oller has refuted this in his discussion regarding Einstein's Gulf: the gap between sensorial experience and the verbal expression of it. The ability to verbalize in abstract terms cannot be simply learned just from the contact with an object, but requires an innate (hard wired) intelligence, and training to develop a language that describes the object and gives it meaning. (J.W. Oller and J.L. Omdahl 1994)

In language development, the first words (surface symbols) are those associated with physical objects, and their properties. This tendency in writing is demonstrated in the early pictograms of Sumer.¹⁸⁸ The narrative is a natural outgrowth of this. Any successful communication will require the use of surface symbols that have a real and understood association, among the sign users (those of a common language) with accepted tangible physical objects.¹⁸⁹

Thus when a narrator is attempting to tell a story, the choice of words becomes vital. If one is attempting to tell a true narrative then word (surface) symbols that most closely match and are most easily understood to represent the true object(s) of the event are chosen. In the case of other forms of narratives such as errors, lies, and fiction this is not necessarily so (to be discussed later). It would seem that this would be intuitively straight forward, but Cotterell¹⁹⁰ has pointed out some difficulties such as meanings changing over time or having different implications in different cultures, or being used within different contexts and thus not having the exact same implied meaning in each setting. Nonetheless, by reviewing the variances of usage of a word within a culture, and in the setting of the Bible with the process of canonization; and the commonality and dissimilarity of stories like creation and the flood among different cultures; an allowance for both internal and external constraints on the meanings of specific words can be obtained. The commonality of basic social concerns within people groups present and past allows some correspondence as well. Finally, for the Christian the concept of verbal inspiration and the anointing of God upon the writers of the Old and New Testament gives a certain amount of reliability.¹⁹¹

¹⁸⁸ J. Naveh, *Origins of the Alphabets* (Jerusalem: The Jerusalem Publishing House, 1976).

¹⁸⁹ J. Oller, *Milestones*, 197-8; 450.

¹⁹⁰ P. Cotterell, "" in *Linguistics, Semantics, and Discourse Analysis*, (Grand Rapids, M.I.: Zondervan Publishing, 2001).

¹⁹¹ An internal consistency is very important to the understanding of ancient texts. The exactness of transmission of the Hebrew text is well demonstrated in comparing various texts (e.g. copy approximately 200 B.C. from Qumran to our present texts). On page 146 the author stated, "few English translations of the Old Testament have been affected. The reason is that generally the biblical Qumran texts are so close to the Hebrew text behind the Masoretic Text that they lend support to, rather than emend,

A true narrative is composed of a series of objects (physical, or identified with something physical), described in a logical time space continuum. Thus it is composed, at its core regardless of the culture or sociologic age, of nouns, verbs, modifiers, and direct objects. Determinacy tends to deal with those words, surface forms (symbols) that are associated with the nouns, direct objects, and occasional descriptive action verbs. Whereas, Connectedness aligns with the verb and modifier forms because of its association with the sequencing of time. (This will be discussed in the next section.) Finally, Generalizability deals with the resultant evidence of the unique event or the reproducibility of it. (To be dealt with in the third section.)¹⁹²

KEY WORDS THAT DEMONSTRATE THE CONCEPT OF DETERMINANCY

A. NOUNS

1. Noah: Was he was a real person?

In the Old Testament he has been listed in the genealogy of Gen.5:29, the son of Lamech; Gen. 5:32 he was the father of Shem, Ham, and Japheth; Gen.6:11 God spoke to him, and Gen.6:22 he built a large boat. In 1Chron. 1:4 he has been listed in the genealogy leading to Abraham. Isaiah quoted God who spoke to him in 54:9, as well as Ezekiel confirmed this in Ezek. 14:14.¹⁹³ In the New Testament Jesus Christ made reference to him as a literal person: Matt.24:37, and Lu. 3:36. the writer of Hebrews referred to him Heb.11:7, and Peter the Apostle cited him in his letters 1st and 2nd Peter.¹⁹⁴ There are 49 references to him in the Old

those versions that rely upon the Received Text.” Price, R, *Secrets of the Dead Sea Scrolls* (Eugene, OR: Harvest House Publishers, 1996), 146.

¹⁹² This is according to J.W. Oller’s True Narrative Representation or TNR. (See Methods section)

¹⁹³ In the Old Testament in this passage Noah is associated with two other prominent Biblical personages: Daniel and Job.

¹⁹⁴ In 2 Peter 2:4-6 there is a coupling of God’s general judgment during the time of Noah and a local judgment of Sodom and Gommorah during Abraham time. Sodom has probably been located in the Jordan Valley at Tall el-Hammam.

Testament and 5 in the New Testament.¹⁹⁵ In all, there are references to him as an actual man—he married and had children, built, drank wine (got drunk and thus sinned), God talked with him, he lived at a certain time “in the days of Noah” etc.¹⁹⁶ The Jewish philosopher Philo Judaeus wrote regarding Noah.¹⁹⁷ His writings reference him at least nine times. The context included God’s foreknowledge of him and thus the choosing of his name, his being a husbandman, and he is included in issues such as sobriety and drunkenness. Clearly, Philo considered Noah a real person.

Secular writings from Sumer, Assyria, Babylonia, and from the oral and written traditions of virtually every tribe, tongue, and known culture have a Noah like character.¹⁹⁸ That he is able to be identified in these ancient writings is collaborative evidence to his historicity. The object has remained the same but the surface word (symbol) that seemed most appropriate in each sign group has been assigned to him—possibly as the result of the process of translation, and even transliteration.¹⁹⁹

¹⁹⁵ From Strong’s Concordance counting the number of listings of Noah.

¹⁹⁶ 1Peter 3:20

¹⁹⁷ Per the Introduction, "Philo, usually known as Philo the Jew (Philo Judaeus) or Philo of Alexandria (a city in Egypt, with a large Jewish Diaspora population in Greco-Roman times), lived from about 20 B.C. to about A.D. 50. He is one of the most important Jewish authors of the Second Temple period of Judaism and was a contemporary of both Jesus and Paul." Philo Judaeus, *The Works of Philo*, trans. C.D. Yonge (Peabody, MA: Hendrickson Publishers, 1993).

¹⁹⁸ Bergman quoted H. Morris who listed 5 traits among 200 flood traditions found worldwide that have an 82-95% correlation. J. Bergman, "Do Creation and Flood Myths Found Worldwide have a Common Origin?" in *The Fifth International Conference on Creationism held in Pittsburgh, August 4-9, 2003*, ed. R.L. Ivey (Pittsburgh: Creation Science Fellowship, 2003), 517-528.

¹⁹⁹ See the sections on Generalizability and Discussion for some of the different names, in different areas of the world, of Noah and the mountain he landed on.

In the Hebrew, the root of the term *nuah*²⁰⁰ means rest, settle down, “the absence of spatial activity and presence of security”.²⁰¹ In Ugaritic it is *nh*, and in Akkadian *nahu*. Noah is the derivative assigned to the man.

Mendelsohn in his book The List quoted Rabbi Friedman’s word play in the Hebrew on Noah’s name: Noah *masa^hen* means ‘Noah found favor’, *wayinna^hem*: ‘he regretted’, *nih^hamti*: ‘I regret’, and *wattana^h*: ‘and the ark rested’, as it reflected something of the character of his name.²⁰²

Munk made several important observations regarding Noah and his name.²⁰³ On page 96 under the heading ‘vav, the letter of conjunction and continuity’ he stated, “These are the offspring of Noah (Gen. 6:9). Man’s new lineage began with Noah after the rest of the human race perished in the Flood. After the deluge Noah stood at the head of a new generation of mankind; accordingly his progeny is described as children of Noah, not as children of Adam.” He, on page 128, noted the number *Yud* (10) as important as there were 10 generations from Adam to Noah and 10 from Noah to Abraham. And, on page 175, the number 70 (or *ayin*) became important as, “The number seventy is critical in the turning points of history: After the Flood, Seventy nations descended from Noah; seventy languages emerged at the building of the Tower of Babel; the Jewish nation began with the seventy people who came with Jacob to Egypt (Exodus 1:5); and in the World to Come, the seventy prime nations will recognize Hashem as the One and Only God and the Ruler of the World.” On page 189-90 in the chapter entitled ‘*Tzaddi* The Symbol of Righteousness and Humility’, he commented, “The term

²⁰⁰ Strong's Concordance (1323).

²⁰¹ TWOT (254b).

²⁰² D. Mendelsohn, *The Lost A Search for Six of Six Million* (New York: Harper/Perennial, 2006), 155-156.

²⁰³ Rabbi M.L. Munk, *Art Scroll Series Expositions on Jewish Liturgy and Thought*, ed. Rabbis N. Scherman and M. Zlotowitz, *The Wisdom in the Hebrew Alphabet* (Brooklyn, N.Y.: Mesorah Publications Ltd, 1983; 5th impression 1990), 96,128,175,189-90.

tzaddik is also applied to human beings who emulate God's righteousness by conducting themselves with integrity, truth, and justice.... The Divine *Tzaddik* [God] sustains and protects the world; through his merits the human *tzaddik*, too, sustains and protects the world. Noah who started the world anew after the Flood is called a *tzaddik* (Genesis 6:9)."

The scriptures and the Jewish culture present Noah as a real man, and as a man of symbolic character.

2. HILL OR MOUNTAIN: What was being described- hills or mountains, and were they as we presently know them?

Har or **הַר** (har), the abbreviated form of *Harar*, can be used to describe both a small rise to a large mountain: the hill of Jerusalem (Is. 10:32) to Mount Sinai (Ex.34:2) and the mountains of Ararat (Gen. 8:4).²⁰⁴ It is translated as hill 61 times and mountain 486 times. It is used as a symbol of power, of God's greatness, i.e. that He is greater than the mountains, as a place for nearness of worship, and as the place for divine abode (particularly secular cultures). As a type it is used as for the law in the old covenant (Sinai), and for grace in the new covenant (Zion).²⁰⁵

²⁰⁴ NIDOTTE (H2215) (H2215) "rh' (har), nom. mountain, hill (H2215). ANE The nom. is confined almost entirely to Heb., and cognate words are rare. The following forms occur occasionally in Northwest Semitic: Ugar. hr, EA h~arri, and Phoen. and Punic hr. OT 1. Mountains have a distinctive significance in the OT in comparison with other phenomena of the natural world. Their very size and solidity suggested an image of extreme durability to the Israelites, with the result that the OT frequently associates mountains with what is permanent and unchangeable rather than with the more usual ephemeral characteristics of the physical world. Several OT books speak of "the ancient mountains" (Gen 49:26; Deut 33:15; Hab 3:6) as if they belonged to the very fabric of the earth, and of their "foundations" (Deut 32:22; Ps 18:7 [8]) or "roots" (Job 28:9, Jon 2:6) on which the earth was made secure. The mountains are also extremely resistant to destruction and will be the last thing to disappear if the earth ever suffers the ultimate catastrophe (Ps 46:2-3 [3-4]; Isa 54:10)." Interesting the author of this note does not refer to the covering of "all mountains" during the Noah Flood.

²⁰⁵ TWOT (#517a).

The bible does use another word for hill. It is *gibah* or גִּבְעָה²⁰⁶ and has been used to describe a small rise or convex surface.²⁰⁷ Often it has been used in juxtaposition with the word *har*. For example in Psalm 72:3; where it, *gibah*, was translated “little hill”, *har* was translated as mountains in the KJV. It has been used in this sort of conjunction over half the time, where it, *gibah*, was generally lower in height.²⁰⁸ As an example, the topographic rise upon which Jerusalem sits (**Figure 1**) has been described by both *har* (Is. 27:13) and *gibah* (Is. 10:32). Mount has been used to designate Zion in the same sentence as the hill of Jerusalem (Is. 10:32). This may indicate the prominence and importance of the rise of Zion proximate to the rolling convex country of Jerusalem (Figure 1). The first use of *gibah* occurred in Gen. 49:26, where Jacob blesses Joseph, before that *har* was used.

Gibah was often used in prophetic literature and in reference to pagan worship sites, but rarely in reference to where *Yahweh* was worshipped.²⁰⁹

If one used the meanings of the letters to develop a word picture then *har* could mean “the lifted up and revealed head “; and *gibah* as “to behold, to see a house lifted up”.²¹⁰

Noah used only *har* and no other word, and clearly meant to use *har* for rises in the geographical terrain, and that the flood waters did cover the *har*. Whether the

²⁰⁶ NIDOTTE “(H1496) h [;b]GI (gib’â I), nom. hill, height (H1496). ANE Also in Middle Hebrew and Jewish Aramaic, and cognate with the rare Assyr. term gab’u, height. OT 1. In more than half its occurrences, h [;b]GI is used in association or in parallel with rh’, though it covers a narrower range of meaning than rh’. The geographical features to which h[;b]GI refers are generally lower as to height and more easily accessible than those described as a rh’, even though several passages emphasize the height of a h[;b]GI (Isa 2:14; Jer 49:16). A significant proportion of occurrences are found in the prophetic literature, often in an eschatological context describing either imminent judgment (Jer 4:24; Zeph 1:10) or blessings that will stream from the hills (Isa 30:25; Joel 3:18 [4:18]; Amos 9:13).”

²⁰⁷ W. D. Mounce, *Mounce's Dictionary* (Grand Rapids, M.I.: Zondervan, 2006), (H1496).

²⁰⁸ NIDOTTE (H1496).

²⁰⁹ NIDOTTE (H 1496).

²¹⁰ Seekins *Hebrew Word Pictures HAR: R(resh) head, highest person. H (hay) behold, reveal. GIBAH: H (hay) behold, reveal. I (ayin) eye to see. B (bet) tent, house. G (gimmel) camel, carry, lifts up.*

terrain before the flood was similar to present or dramatically different will be discussed later. Some insight into whether he viewed it as local to himself or over a greater area has been appreciated in the study of the use of terms for earth and ground (see below).

3. EARTH AND GROUND: There are only two terms for the earth or ground in the Noah flood story. How were they used in this section of scripture?

The first of these terms is *eres* or אֶרֶץ (*'eres*),²¹¹ is generally used within the context of the entire land, the whole earth such as Gen. 1:1, e.g. and God created the heavens and the earth. It is found 2505 times in the Bible, and is often used when referring to God's possession of it (Exod.19:5), the place where man dwells (Ps115:16), and can be cursed (Gen. 3:17-19) as a result of sin. It can be blessed through covenant (Gen.18:18). It encompasses the term "to the ends of the earth" (Isa 40:28). When the raven was sent out it looked for a place to rest on the *eres*.²¹²

The second term is *dama* or אֲדָמָה (*^adāmâ I*),²¹³ and occurs 225 times in the Bible, especially in Genesis. It tends to be used more in situations where the cultivation of

²¹¹ NIDOTTE "(H824) אֶרֶץ (*'eres*), nom. fem., **earth**, land (H824).

ANE Akk. *eršetur*, Ugar. *'rš* cf. *TDOT* 1:388-92. OT Occurring some 2505x, אֶרֶץ has a broad range of meaning, from the whole **earth**, through particular countries, especially the land of Israel, local districts, the soil, to the ground inside a tent (*Josh 7:21*). Theologically we will concentrate on the two dominant senses: the **earth** and the land of Israel...*Universality and sovereignty*. Though it is not always clear whether אֶרֶץ means "earth" or "land," the expression אֶרֶץ כְּלֵהָאָרֶץ frequently means the whole **earth**, rather than just "the whole land" (cf. *Gen 1:26; 11:4, 8, 9; Ps 8:1 [2], 9 [10]*)."

²¹² CWSOT (Zohaites) Ge.8:7.

²¹³ NIDOTTE "(H141) אֲדָמָה (*^adāmâ I*), ground; piece of land; earth; underworld; ground, soil... ANE The nom. אֲדָמָה appears to derive from a Sem. root, *'dm*, to be red: Aram., Syr. *'adamtā'*, land; Old Aram. *'dm[h]*, cultivable land; Arab. *'adamat*, land; Nab. *'dmth*, land. OT אֲדָמָה occurs 225x in the OT, most frequently in Gen (43x), Deut (37x), Ezek (28x), Jer (18x), and Isa (16x)... 2. *General term for ground*. In a broad sense, אֲדָמָה connotes land on which people stand (*Exod 3:5; 8:21 [17]*)... 3. *Cultivable land*. In many contexts אֲדָמָה connotes cultivable land/fields as opposed to barren lands (cf. *בְּרֶכֶת, עֵרְבָה, שְׂמֹמָה*, See *Desert: Theology*).... 4. *Inhabited earth*. The nom. אֲדָמָה can carry a universal significance, approaching the common meaning of אֶרֶץ, the world, although אֲדָמָה refers to the

the soil is being referred to (Gen. 4:2), or to the inhabited earth (Gen. 12:3). A unique collocation occurs as ‘Land (ground) of Israel’ (Ezek. 7:2), which invokes a divine attribution. When he sent out the dove it looked for a place to rest on the *dama*.

Noah tended to use *eres* when referring to the inundation of the earth by water (Gen. 7:10), and *dama* when God judges and destroys life from off the earth (Gen. 7:8, 7:23). It must not be assumed that Noah only had a local sense or “line of sight” perspective of the magnitude of the flood. He used the two forms of the words in conjunction in Gen. 8:7 and 8:8 for the earth drying up *eres* in general; and then the ‘face’ of the earth drying up *dama* in particular, i.e. the land(blessed) to be associated with his promises from God to preserve him. It seems that he had a sense of the land that would belong to him, and of a vaster portion of land, maybe global, that did not (**Figure 2, 3**).²¹⁴ As well, the concept that God could have revealed the extent of the flood to him cannot be excluded.

inhabited world (e.g., Gen 12:3, “all peoples on earth,” כָּל־מְשֻׁפְּחֹת הָאָרֶץ מִמָּוֶה; cf. 28:14; Amos 3:2).--- the phrase עַל־הָאָרֶץ כָּלָּה (23x) can refer to the earth as a whole (Isa 24:21), the land of Egypt (Exod 10:6), a land of exile (Amos 7:17), and **most commonly, the land of Israel** (Exod 20:12; Num 11:12; Deut 4:10, 40; 5:16; 7:13; 11:9, 21; 12:1; 25:15; 28:11; 30:18, 20; 31:13; 32:47; 1 Sam 20:31; Jer 25:5 [most of these references belong to statements offering the potential of longevity in the Promised Land, see below]).-- On a number of occasions, the biblical spokesman mentions the entire surface of the earth as the vast region from which a condemned people is removed (Noahic flood— Gen 6:7; 7:4, 23; other divine judgments— Exod 32:12; 1 Sam 20:15; 2 Sam 14:7; 1 Kgs 9:7; 13:34; Jer 28:16; Amos 9:8; Zeph 1:2-3) or Yahweh's removal of his vassal nation from the land of promise (Deut 6:15). **The phrase can also designate the land of Israel** (1 Kgs 8:40 = 2 Chron 6:31; 1 Kgs 17:14; 18:1; Jer 35:7) or the entire inhabited world (Gen 4:14; 6:1; Exod 33:16; Num 12:3; Deut 7:6; 14:2; Isa 23:17; Jer 25:26; Ezek 38:20).

²¹⁴ Early in the history of sacred writings there are geographical references that give the impression that a general geometric shape of the earth may have been known. In Isa. 40:22 it talks about God sitting upon the ‘circle’ (Strong # 2329) compasses of the earth (*eres*). Job 22:14 states that ‘He walketh the circuit(Strong 2329) of heaven’. In Ps. 19:6 it says ‘His going forth from the end of heaven and His circuit- a course, coming around of time and space unto the ends of it.’ (Strong 8622 and TWOT 2001a). Finally, in Job 26:7 it says ‘He hangeth the earth (*eres*) upon nothing.’ Thus, there is the arch of the sky, the circle of the edges of the earth, and it hanging upon nothing. From this, a sense of the global nature of the earth could have been understood. It is known that the Babylonians and Egyptians were calculating the areas and volumes of objects, had fractional math at the early times of their history, and made astrologic calculations upon which to compose calendars. As well, there are anthropologic data, to be discussed later, that man very early on rapidly expanded across the land masses to distant areas and could have allowed for calculations of land areas to have been done. It seems quite clear that the Romans had a sense of the global nature of the earth, and this is reflected on many of their coins where the Caesar holds a globe in His hand

4. Flood: Is it a unique word, and can a reader get some sense of its magnitude from this word?

In the Genesis flood account the word used for flood is unique among those used for watery catastrophes in the scriptures. It is *mabbul* or מַבּוּל.²¹⁵ A cognate for it among the near eastern languages has not been found.²¹⁶ It is used only one other time in Ps. 29:10, referring to God sitting above the flood. Thus, it is not only an ancient term, but one that had a particular meaning and remained in use even up to the time of David. This is also supported by the fact that an article is placed in front of it in all but two instances when it is used in the book of Genesis. It is “the” flood. During the rising of the waters it is juxtaposed to the term for waters, but during the subsidence it is not. This may reflect its use as catastrophic term. Its only other use in reference to God residing over the flood places it unique among other relations between gods and the waters. In the Ugaritic story, Baal the storm god defeats Yam the sea god, implying that these gods are part of or only control a portion of nature.

often with a phoenix standing on it to guide him in his conquests (see Figure 2). The ancient Greeks had a sense of the spherical shape of the heavens. This is portrayed in an image of Atlas (**Figure 3**).

²¹⁵ NIDOTTE (H4429) “מַבּוּל (*mabbûl*), nom. heavenly ocean, deluge.’ ANE Scholars have suggested and discarded a number of etymologies for מַבּוּל: Akk. *abbu*, deluge; *bubbulu/biblu/bibbulu*, inundation; *nabflu*, to destroy; *balflu*, sprinkle, mix, blend; Heb. יָבַל, to flow, stream; נָבַל, waterskin; Sum. Eblaite *ma-ba-lum*, heavy water, deluge... (many) scholars affirm that מַבּוּל describes the deluge or inundation of flood waters that God brought on the earth during Noah’s life (Reymond, 78). The presence of the article on all but two instances (Gen 9:11, 15) in the Flood account (Gen 6-11) may indicate that this מַבּוּל was a well-known event. All five instances of מַבּוּל that look forward to (6:17) or describe the impact of the Flood (7:6-7, 10, 17) are juxtaposed with a form of מַיִם (waters). Although some suggest that מַיִם is redundant and might be a gloss (esp. in 6:17), it might have served to explain a phenomenon unknown to Noah. The two anarthrous examples (9:11, 15) occur where the Lord promises not to destroy the earth by means of a flood again. In the last four occurrences מַבּוּל serves as a *terminus a quo* for the temporal setting of later events.... The couplet in Ps 29:10, ‘The LORD sits enthroned over the flood (מַבּוּל); the LORD is enthroned as King forever’ directs attention to Yahweh’s sovereignty. At several points in Ps 29, the psalmist alludes to Ugar. mythology as a polemic device to demonstrate the absolute superiority of Yahweh over Baal. In Ugar. literature Baal defeats Yam, the sea god (*KTU* 1.2.IV:19-32, *CML*, 44-45), and later sits enthroned (1.101:1-2).”

²¹⁶ NIDOTTE (H4429).

In contrast, Psalm 29 stated that *Yahweh* was above and reigned over all nature (and those gods)—not just portions of it.²¹⁷

There are other words used in the bible to describe watery catastrophes, but they apply to local events. For example, the term *hanamal* or **הַנַּמַּל** (*ḥ^anāmal*),²¹⁸ is used in used to signify hail in Exodus 9:13-35, although some have translated it as a ‘devastating flood’. In reference to Egypt it was localized. Another word ‘sup’ or **צוּף** (*ṣûp I*),²¹⁹ was used to describe the watery destruction of Pharaoh during the exodus, and resulted in his army floating to the surface upon being destroyed. Again, it was very destructive but local in effect. The term ‘sot’ or **שׁוֹט** (*šōt II*),²²⁰ is used in metaphorical sense with another term for flood **שַׁטַּף** (*šātap*)²²¹—like a flood the flogging and scourging will come; Is 28:15. Again the term is juxtaposed to another term ‘zaram’ or **זָרַם** (*zāram II*): which can mean an overflowing by water—but again used in a figurative sense of casting down of the prideful.²²² Finally, the term ‘shibboleth’ or **שִׁבְבוֹלֶת** (*šibbōlet II*),²²³ is used within the context of an over whelming stream, symbolic of apparent insurmountable problems as in Psalm 69:2.

²¹⁷ NIDOTTE (H4429) “The couplet in Ps 29:10, “The LORD sits enthroned over the flood (מַבּוּל); the LORD is enthroned as King forever” directs attention to Yahweh's sovereignty. At several points in Ps 29, the psalmist alludes to Ugar. mythology as a polemic device to demonstrate the absolute superiority of Yahweh over Baal. In Ugar. literature Baal defeats Yam, the sea god (KTU 1.2.IV:19-32, CML, 44-45), and later sits enthroned (1.101:1-2).”

²¹⁸ NIDOTTE (H2857) “**הַנַּמַּל** (*ḥ^anāmal*), nom. sleet, flood (hapleg.; Ps 78:47).”

²¹⁹ NIDOTTE (H7429) “**צוּף** (*ṣûp I*), q. flood, overflow; hi. make float (H7429).”

²²⁰ NIDOTTE (H8766) “**שׁוֹט** (*šōt II*), nom.(sudden) flood.”

²²¹ NIDOTTE (H8851) “**שַׁטַּף** (*šātap*), q. wash away, flood, overflow; ni. be washed off, pu. be washed off.”

²²² NIDOTTE (H2442) “**זָרַם** (*zāram II*), po. (clouds) pour out (water) (H2442); nom. **זָרַם** (*zāram*), violent rains.”

²²³ NIDOTTE (H867) “**שִׁבְבוֹלֶת** (*šibbōlet II*), nom. torrent, undulation.”

Rabbi Rashi, an 11th century Jewish sage, is quoted by Mendelson. Rashi believed that the uniqueness of this word for the flood is further revealed in the three verb roots for b-l, derived from *m-b-l* (the consonantal root verb of *mabool*). 1) n-b-l means “to decay”. 2) *b-l-l* means “to confuse”. And 3) *y-b-l* means “to bring” (about or upon). Thus the flood root verb is composed of 3 concepts that “it decays everything, because it confused everything, because it transported everything.”²²⁴ This is consistent with the verb *maha*²²⁵ in Gen. 6:7 where God says he will destroy man. It literally means “to wipe out” as wiping a bowel clean.²²⁶

The term ‘*mabbul*’ is used only for the Noah flood account, in a naturalistic and not allegorical context, and by inference is applied to a widespread and even global flood.

5. ARK:²²⁷ There is a unique word for this term, only used in the book of Genesis for the ark of Noah and in Exodus for the container that Moses was put in. What significance is there in the particular use of the word?

Ark is the English equivalent for the Latin word for boat *arca*.²²⁸ In Hebrew the word is the same for vessel that Noah rode in during the flood and for Moses’

²²⁴ Mendelsohn, *The Lost*, 171-2. He stated that the Jewish teacher Judah Loew Bezakel (1525-1609) concurred with Rashi on this point.

²²⁵ Strong (4229).

²²⁶ TWOT (#1178).

²²⁷ NIDOTTE (H9310) “תֵּבָה (tēbā), nom. ark, basket .”... “ANE 1. תֵּבָה is often assumed to have Egypt. origins in the root *tbt*, although this is not unanimous, and some propose Babylonian origins or an Akk. loanword (*elippu tebīta*).” V.P. Hamilton in his commentary on The Book of Genesis Chapters 1-17(1990) stated, “The Hebrew word for *ark* (*teba*) occurs only the Flood narrative and in Exod.2:3,5, where it is the ‘basket’ in which the infant Moses is placed by his mother. Thus two remarkable persons in the Scripture are saved from drowning by being placed in an ‘ark’. The OT uses another word, ‘*ron*’, for the ‘ark of the covenant,’... The origin of Heb. *Teba* is uncertain. Most scholars connect the word with Egypt. *db3t*, ‘chest, box, coffin.’ The Ebla texts seem to have a cognate term, *teba/tiba*, found in various expressions: *tiba-hu*, ‘he is the ark’; *ti-ba-ti-il-li*, ‘arks of the gods’; *ia-ti-ba^{KI}*, ‘Ya is the ark.’”

²²⁸ The article states that “The Latin Vulgate says ‘*requievitque arca [...] super montes Armeniae*’, which means literally ‘and the ark rested [...] on the mountains of Armenia’, which was corrected to ‘...mountains of Ararat’ (*montes Ararat*) in the Nova Vulgate(New Vulgate).” *Wikipedia*,

vessel when he was placed in the container on the Nile River. It is תֵּבָה (*tēbâ*) and it is used in the bible only within these two connotations. Some scholars believe that it is derived from the Egyptian *dbt* word for coffin. Yet the function of the words appears to have been different.²²⁹ On the one hand in Egyptian *dbt* was used to transfer the dead to the afterworld, but on the other hand, *teba* in the bible, was used to preserve to life, in this world, and to carry the righteous through times of tribulation and judgment.²³⁰

It is clear that it was a true structural item: Noah's Ark floated, could carry things on three levels, had a window and door, was coated with pitch over a woody frame, and had dimensions (**Figure 4**). Beyond the concept of three dimensions, floors/windows/doors, and composition, no further structural detail is given—no description of a sail or rudder or any other form of locomotion. Moses' ark was made of a reed type material, covered with pitch, floated and could carry a baby (**Figure 5**). Yet with both vessels the sense given is that it would be driven along under the provenance of God as seen with Moses' vessel as it coasted to where Pharaoh's daughter was washing- as was witnessed by Miriam his sister.

article date, "Mountains Of Ararat," http://www.en.Wikipedia.org/wiki/Mountains_of_Ararat/ (accessed 2009).

²²⁹ Lovett, T, "Ark," *Worldwide Flood*, http://www.worldwideflood.com/ark/what_shape/ark_boxhtm. Tim Lovett in his article comments that if one considers the word *tbh* as meaning 'life saver' then it could be a derivative from the Egyptian term, as both usages convey the idea of transferring a person through an event. He says that this might possibly meet Chaim Cohen's objection that *dbt* does not mean a boat. Thus this unique term would cover both a metaphorical and a structural meaning.

²³⁰ TWOT (2494) U. Cassuto is quoted, "In both cases [Noah and Moses] there is to be saved from drowning one who is worthy of salvation and is destined to bring deliverance to others; here it is humanity that is to be saved, there it is the chosen people." As well in TWOT it is stated, "Noah's ark as a symbol of salvation is compared to the ordinance of baptism in 1Pt 3:20f., and as a symbol of God's protection from external evil, it was frequently sketched by the early Christians on the walls of the catacombs under the streets of ancient Rome."

There are other Hebrew words that are more commonly used to describe a “boat”^{231,232} yet these are not used in these two accounts. The first, **סִי** (*śīl*), is used within the context of a warship-Dan. 11:30. The second, **אֲנִיָּה / אֲנִיָּה** (*ʾnî / ʾnîyâ*), is found more broadly utilized as relating to a commercial ship, I Kgs.9:26-7, in images of blessings and cursings, Jon.1:3-5, and of the false security of Tyre upon which the judgment of God falls, Ez.27:9,25-7. The vessel (ark) of the covenant used a different term in the Hebrew.²³³

In the Septuagint Old Testament the Greek word, *Kibotos*, is used to describe both the vessels of Noah, and the Covenant, but not Moses’ basket. The Latin follows this trend. Lovett stated that this may reflect that the Greek *Kibotos* did not have a broad enough meaning to be used for both Noah’s and Moses’ vessels. The New Testament writers use *Kibotos* for Noah and the ark of the covenant.²³⁴ Jerome’s Latin translation in 405 AD follows the trend of the Greek.²³⁵

Genesis is very specific regarding the dimensions of the ark and used the **cubit** as the unit of measure (**Figure 6**). The length was 300 cubits, breath 50, and the height 30. The term for **cubit** is “**אַמְמָה** (*ʾammâ l*)”...“the distance between the elbow and the tip of the middle finger (44.5-52.5 cm; 17.5-20.5 in.)”²³⁶ It also had a **window**

²³¹ NIDOTTE (H7469) “**סִי** (*śīl*), warship”.

²³² NIDOTTE (H639, H641) “**אֲנִיָּה / אֲנִיָּה** (*ʾnî / ʾnîyâ*), ship, fleet, vessel”... **אֲנִיָּה** is used collectively (viz. fleet) and **אֲנִיָּה** in the pl.”

²³³ NIDOTTE (H778) “**אֲרוֹן** (*ʾrôn*), nom. ark, chest, coffin.”

²³⁴ See Noah’s ark: Matthew 24:38, Luke 17:27; and ark of the covenant: Hebrew 9:4, Revelation 11:19.

²³⁵ Tim Lovett, “Does Ark Mean Box?” www.worldwideflood.com/ark/what_shape/ark_box.htm

²³⁶ NIDOTTE (H564, Strong 520) “**אַמְמָה** (*ʾammâ l*), nom. cubit, ell, forearm, the distance between the elbow and the tip of the middle finger (44.5-52.5 cm; 17.5-20.5 in.)... **אַמְמָה** occurs also in Aram., Akk., Ugar.; **אֲרָה** appears also in Aram. and Syr.; **טַפְּחָה**, **טַפְּחָה**, **טַפְּחָה** are cognate to Akk. *tappu*, *tpu*; **גְּמָדָה** occurs in Mishnaic Heb., Eth. *ǧend*, Tigre *ǧammad*. From the Hezekiah inscription the tunnel was

and **door**, but mentions no sail or rudder. The term for “window” in the King James or for “roof” as found in the NIV, in Genesis 6:16 is “צָהָר (*šōhar*)”.²³⁷ Yet, in Genesis 8:6 the term is) “חַלּוֹן (*hallôn*), nom. Window.”²³⁸ Thus, it describes a roof structure which could be opened. Genesis 8:2 mentions the “windows of heaven” in the KJV but in the NIV it is called the “floodgates of heaven”. The word used here is “אַרְבַּע (*‘arba‘ D*), nom. four (cardinal number)” and may reflect the waters of heaven being from the four corners of the earth (i.e. worldwide from the perspective of the writer).²³⁹

The composition of the ark is listed as well. It was composed of “**gopher wood**” and sealed with “**pitch**.” The word for “gopher”, “גֹּפֶר (*gōper*), is an unknown wood.”²⁴⁰ The word for wood is well established and is “עֵץ (*‘ēš*), nom. wood,

said to be 1200 cubits long. Modern measurements place the tunnel at 533-537.5 meters long. The cubit, at least in 700 B.C., would be about 17.5-17.64 inches.”

²³⁷ NIDOTTE (H7415, Strong 6672) “צָהָר (*šōhar*), roof.” TWOT (1883) comments that it can mean noon day, brightness, purity of justice, a light in darkness, or a roof. As well (pg 755), “It is also viewed as a time of security; thus a conquest carried on at this time indicates a conqueror’s superior strength (Jer. 6:4; 15:8; 20:16; Zeph. 2:4).”

²³⁸ NIDOTTE (H 2707, Strong 2474) “חַלּוֹן (*hallôn*), nom. Window.” TWOT suggests that it means a piercing through a wall to make a hollow hole. It is used in Joshua 2:15 to let the spy down through the “window” in the wall, and in 2Sam.6:16 when Michal watched David from the “window”.

²³⁹ NIDOTTE(H752,Strong 699) “אַרְבַּע (*‘arba‘ D*), nom. four (cardinal number)... Babylonian cosmology discerned four phases of the moon, four forms of the sun's appearance, and four turning points in the year. An Akk. title is *šar kibrātīm arbā'im*, King of the Four Corners of the World.... OT 1. Four often indicates the four cardinal points of the compass, based on human symmetry (left, right, before, behind)... four winds (Ezek 37:9; Dan 8:8; 11:4), four corners of the earth (Isa 11:12), and four primeval rivers (Gen 2:10). Encompassing all directions, four often indicates completeness and comprehensiveness.... The universal sovereignty of God means that judgment (Ezek 7:2) or salvation (Isa 11:12) reaches to the four corners of the earth. Apocalyptic writing makes abundant use of the universal four (Dan 8:8; 11:4; Zech 6:5).”

²⁴⁰ NIDOTTE (H1729, Strong 1610, TWOT 374) “גֹּפֶר (*gōper*), unknown wood.” TWOT (pg 170-171) comments that the word may be *kapar* with the *g* was miswritten and was actually *k*. As such it would mean “to cover over” and be composed of a resinous wood like fir or pine, but this is conjecture.

tree”.²⁴¹ It is used in a variety of scriptures such as Gen. 22:3 as “wood” cut for the burnt offering, Ex. 25:13 acacia “wood” overlaid with gold for the temple, and in Deut. 29:17 as idols of “wood” and stone. It is probable that the Hebrew reflected more accurately (than the Greek or Latin) the terminology in expressing a unique word for the vessel (ark) of Noah and Moses. Both were structural vessels that floated and were ‘life preservers’ in both a physical and metaphorical divine way, not to be duplicated again,²⁴² except allegorically, i.e. spiritually, with Christ.^{243,244}

The word for “Pitch” is “כָּפָר” (*kōper II*), nom. bitumen, pitch, asphalt”, and worked as a sealant.^{245,246} It is probable that it refers to a type of sealant, pre-flood,

²⁴¹ NIDOTTE (H6770, Strong 6086, SK 6770) “עֵץ (‘ēṣ), nom. wood, tree ... עֵץ is a common Sem. root for trees, wood, lumber, timber, sticks, etc. It is used in Akk. *īsu*; Ugar. ‘š; and in Phoen. Eth. ‘eḏ (cf. OSA ‘ḏ). It appears as כָּפָר in Aram. (cf. Egypt. Aram. כָּפָר), because of dissimulation. The original root is uncertain.”

²⁴² Many Christian writers do refer to Noah’s ark as a type of Christ in which true believers are saved from the tempestations of this present world. Jewish writers refer to the Noachide Laws (see Discussion) for guidance to themselves and to non-Jews alike.

²⁴³ Mathew 24:37-44.

²⁴⁴ On page 49 it stated, "The term (*teebah*) is applied to the infant Moses' ark. *Teebah* is evidently the Egyptian *teb*, "a chest," Hebraised. It has no Semitic equivalent. It is a type of the manger which disclosed to the shepherds Messiah, who, beginning with the manger, at last ascended to His Father's throne...." *Fausset's Bible Dictionary*, 10th printing ed., s.v. "Ark."

²⁴⁵ NIDOTTE (H4109, Strong 3724, SK 4109) “כָּפָר (*kōper II*), nom. bitumen, pitch, asphalt... כָּפָר (*kāpar II*), denom. vb. in q. with meaning coat/cover with pitch, bitumen, asphalt; in other patterns cover, purgate (H4106). Akk. *kupru/kupuru*; Syr. *kūprā*; Arab. *kuār, qaār*. OT The vb. and its cognate nom. כָּפָר are used once each in Gen 6:14.... The word is found in the Gilgamesh Epic (11:65) in parallel with its use here in Gen. It was clearly a water sealant and repellent. The ark (תִּבְיָה, H9310) was coated/covered (כָּפָר) with כָּפָר, and this is also what was done many years later to Moses’ תִּבְיָה (basket/“ark”). But in Exod. 2:3 the small basket/container is covered (תִּבְיָה) with bitumen/pitch (תִּבְיָה) and pitch/bitumen (אֲפָתָה). Mitchell (*NBD*, 2d ed., 143) suggests strongly that כָּפָר, אֲפָתָה, and תִּבְיָה should all be translated best as bitumen. The three words seem to have such different origins that it seems reasonable to conclude that they refer to the same basic naturally occurring substance.” TWOT (pg 453) seems to agree with these comments, but it is not necessarily bitumen (see below).

²⁴⁶ It should be noted that in Gen. 14:10 that the Kings of Sodom and Gomorrah fell into the *tar* or *slime* pits. The KJV used the term *slime*. It is a different word altogether from that used in Gen. 6:14. In Gen. 14:10, CWSOT (#2564), it says “Now the Valley of Siddim was full of **tar** [slime-KJV] pits, and when the kings of Sodom and Gomorrah fled, some of the men fell into them and the rest fled to the hills.” In CSWOT (#2203) is used in Gen. 11:3, “They said to each other, ‘Come, let's make bricks and bake them thoroughly.’ They used brick instead of stone, and **tar** [slime-KJV] for mortar.” Bitumen, or tar, has been

that was and can be produced by burning and extracting sap from trees and then mixing it with charcoal.^{247,248,249} (Figure 7).

Also, it is probable that the Hebrew reflected more accurately (than the Greek or Latin) the terminology in expressing a unique word for the vessel (ark) of Noah and Moses. Both were structural vessels that floated and were ‘life preservers’ in both a physical and metaphorical divine way, not to be duplicated again,²⁵⁰ except allegorically, i.e. spiritually, with Christ.^{251,252}

6. ARARAT: Does this term indicate a real geographical place?

In the Hebrew it is *rrt*, and relates to the land of Urartu, or modern Armenia (eastern Turkey), and parts of Georgia, Iran, and Iraq.²⁵³ It remains contested among scholars exactly which mountain peak(s) is or are the exact one(s), as there is a range of mountains.

documented in the building materials of Babylon. As well this is the term for one of the sealant of Moses’ basket in Ex.2:3.

²⁴⁷ T. B. Walker, "The pitch for Noah's Ark," *Creation*, August, 1984, 20.

²⁴⁸ In conversation with Dr. A. Snelling he has commented, “Most of today’s oil from which bitumen is derived was produced during the Flood and by the Flood, so that cannot have been the source of this pre-flood Bitumen. To suggest, as some have, that this could have been of inorganic origin just doesn’t work. It is true that natural gas, primarily methane, can be produced by inorganic processes, but bitumen consists of heavy long chain carbon molecules, which no one has yet been able to show can be produced inorganically.” Email dated 6/11/2012.

²⁴⁹ Even the term Tar Heel in North Carolina refers to a “pitch” that was made by burning pine wood and extracting the resin. North Carolina was an important source of “pitch” for the British navy in early American history. See Wikipedia “Tar Heel” accessed online 6/12/12.

²⁵⁰ Many Christian writers do refer to Noah’s ark as a type of Christ in which true believers are saved from the tempestations of this present world. Jewish writers refer to the Noachide Laws (see Discussion) for guidance to themselves and to non-Jews alike.

²⁵¹ Mathew 24:37-44.

²⁵² On page 49 it stated, " The term (*teebah*) is applied to the infant Moses' ark. *Teebah* is evidently the Egyptian *teb*, "a chest," Hebraised. It has no Semitic equivalent. It is a type of the manger which disclosed to the shepherds Messiah, who, beginning with the manger, at last ascended to His Father's throne..." *Fausset's Bible Dictionary*, 10th printing ed., s.v. "Ark."

²⁵³ J. B. Corbin, ed. *The Explorers of Ararat* (Long Beach, CA: Great Commission Books, 1999), 150.

²⁵⁴ The Bible states that the ark rested on the “mountains of Ararat” (Gen. 8:4). That it is a specific geographical spot is indicated both within the Bible and from secular sources. In 2 Kings 19:37 Sennacherib’s sons fled to the land of Ararat after assassinating their father. In God’s pronouncement against Babylon He stated that he would bring the Kingdom of Ararat against it (Jer. 51:27). Berossus, a Babylonian chronicler and others, designated Mount Cudi (**Figure 8**) in south-eastern Turkey ^{255,256} but other early Armenian sources denoted Mount Massis (Mt. Ararat) as the site (**Figure 8, 9**).^{257,258}

Dr. Snelling has commented, “Regardless of what early Armenian sources denoted, Mt. Ararat is essentially a recent volcano, most of which was built by post-flood volcanic eruptions. Therefore, the Ark could not have landed on Mt. Ararat on Day 150 of the Flood because Mt. Ararat didn’t exist then. In any case, the Scriptures refer to the Ark landing on “the mountains of Ararat”, Ararat being the region that was originally called Urartu...the volcanism that produced Ararat is a result of the movements at the current tectonic plate boundaries established towards the end of the flood.”²⁵⁹ He is currently looking for possible sites in the region that would be consistent with the geologic information.

²⁵⁴ R.D. Lanser, "An Armenian Perspective on the Search for Noah's Ark," *Associates for Biblical Research* (2008), <http://www.NoahsArkSearch.Com>, (accessed on 6/19/10).

²⁵⁵ J.B. Corbin, ed., *The Explorers of Ararat* (Long Beach, CA: Great Commission Illustrated Books, 1990), 148-165.

²⁵⁶ Lanser made an important point in his presentation in that Berossus drew upon Mesopotamian stories of the flood for his composition, and this may be the reason he chose Mount Cudi (which overlooked the Mesopotamian Valley). R.D. Lanser, *An Armenian Perspective on the Search for Noah's Ark* (San Diego, CA: Annual Meeting of the Near East Archeological Society 2007), online article: www.abr.org (accessed June 19, 2010).

²⁵⁷ *bid.*

²⁵⁸ E. Lee, in *The Explorer's of Ararat* (1999). pp.57-84.

²⁵⁹ Extracted from email from Dr. A. Snelling dated 6/11/12.

7. Waters: What is the usage of this term?

It simply means water, and this term is verified by its usage in the scriptures.²⁶⁰ In the flood story it is used in verse Gen. 6:17, “And, behold, I, even I, do bring a flood of waters upon the earth.” [KJV] It is used in chapters 7 and 8 to describe the rise and fall of the “waters” during the flood.

8. Generations: What is the meaning of this term?

Toledot, תּוֹלְדוֹת, means descendants, generations.^{261,262} It is a derivative of the Semitic root *wld*, and is a prominent term used throughout the Old Testament, both of the relationships between men and in regard to God’s covenant relationship to Israel. He would bless them for generations if they obeyed (Lev.23:14), and punish

²⁶⁰ NIDOTTE (H4784) “מַיִם (*mayim*), water... ANE Akk. *mû*, *māmû*; Ugar. *my* (pl. *mym*); Jewish Aram., Syr. *mayyā*’; Old Aram. מַי (const.); Can. *mi’e’ma*; EA *me/ima*; Israelite (Siloam Inscription) מַי; OSA *mw*, *mh*; Arab. *mā*’; Eth. *māy*; Egypt. *my* (pl. *mw*)”...[water was] “so important, it was collected in cisterns and wells and gathered in various kinds of vessels (Gen 24:11, 20; 1 Sam 9:11; 2 Sam 23:15).”

²⁶¹ NIDOTTE: (H 9352, Strong 3205) “comes from the vb. תּוֹלַד, father, give birth to, bear. As such, it refers to that which is born or produced. The expression ‘these are the generations of’ points to the progenitor and the progeny. In six of these instances, the focus is on one major figure character (as opposed to lesser ones) in the drama of biblical revelation: (i) the generations of the heavens and the earth—Adam/Eve; (ii) the generations of Noah-Shem; (iii) the generations of Shem-Terah; (iv) The generations of Terah-Abraham; (v) the generations of Isaac-Jacob; (vi) the generations of Jacob-Joseph. Five times this phrase ‘these are the generations of’ occurs in Gen 2:4 to 11:26, i.e., from the time of creation to Abraham. It appears 5x from 11:27 to 50:26, i.e., from Abraham’s departure from Ur/Haran until Israel’s sojourn in Egypt... Far from Genesis being a patchwork of unorganized materials, the ‘generations’ formula, pervasive throughout Genesis, ‘transforms historical data, names, narratives, genealogies, and human developments into a coherent framework for understanding the world’ (VanGemeren, *Progress*, 76).”... “(H3528) יָלַד (*yālad*),... תּוֹלְדוֹת (*tōlēdōt*), descendants, generations (H9352)... ANE Akk. *walādu* (CAD 1:287-94)... The Genesis genealogies play a sociological function only minimally (e.g., political legitimation). Rather, they serve a theological function. They affirm that each new child in the genealogy, everybody from Adam to Jacob, represents a link in a chain by which God desires to bring blessing to his world (VanGemeren, *Progress*, 70-77; 102-4). In the Table of Nations (Gen 10), in particular when referring to the Hamites (vv. 6-20) and the Shemites (vv. 21-32), the text uses both בְּנֵי (‘the sons of’) and תּוֹלַד (‘he fathered’) to refer to descendants. The first of these points to the ancestor; תּוֹלַד, by contrast, points to the descendants.”

²⁶² TWOT, (#867), 380. “The precise meaning of this derivative of *yālad* ‘to bring forth’ will be discussed below... As used in the OT, *toledot* refers to what is produced or brought into being by someone, or follows there from.” Pg.378 “The root *wld* (*yld* in Northwest Semitic) is a common Semitic root (cf. Arabic *walada*, Akkadian (*w*)*aladu*, Ugartic *yld* and Phoenician inscriptions *yld*.”

them for sin (Exod. 20:1-5; Deut. 5:9-10) if they disobeyed. It lasted 40 years per generation (1 Kg.6:1). As well it was used as a linguistic structural tool to arrange information (see section on Connectedness). When it spoke of the “generation of Noah” this reflected a specific person to the Jewish reader.²⁶³

9. Fowls, Cattle, Creeping Thing, Beast, Birds, and Kind: What terms are used in the Genesis account to discuss living things?

In the flood story the animals are mentioned several times: Genesis 6:12,19-21;7:2-3,8-9,14,21;8:6,17,19-20,and 9:2,10. Possible reasons for these repetitions are covered in the Connectedness section. In verse 7:14-16 there is the most complete list. In the NIV, “They had with them every wild animal according to its kind, all livestock according to their kinds, every creature that moves along the ground according to its kind and every bird according to its kind, everything with wings. Pairs of all creatures that have the breath of life in them came to Noah and entered the ark. The animals going in were male and female of every living thing, as God had commanded Noah.” In the KJV it reads a little different, “They, and every beast after his kind, and all the cattle after their kind, and every creeping thing that creepeth upon the earth after his kind, and every fowl after his kind, every bird of every sort. And they went in unto Noah into the ark, two and two of all flesh, wherein is the breath of life.” Thus these verses included wild animals (beasts), livestock (cattle), creatures that move along the ground (creeping things), birds, and everything else with wings (fowl). The flying life forms seem to be somewhat ambiguous, and may have included certain forms of insects- but many if not all insects probably survived outside the ark.

²⁶³ Kass points out that the line (generation) of Adam-Seth is contrasted in a moral sense with that of Cain-Canaan. This will be further discussed in the Connectedness section. L. Kass, *The Beginning of Wisdom* (Chicago, IL: University of Chicago Press, 2003)p 152.

Beast: חַיָּה (ḥayyâ I), living creature, animal (**Figure 10a**).²⁶⁴ This verse seems to be a more generic term for land animals. It is used this way in Gen. 7:14, but is differentiated from the quadrupeds in Gen. 7:14, 21; and 9:10.

Cattle: בְּהֵמָה (b^hēmâ), quadrupeds.²⁶⁵ These are the domesticated four legged animals as well as wild ones. There are clean and unclean ones as listed in Gen.7:2, 7:8, and 8:20. It tends to be the term used in Leviticus for the clean animals of the sacrifice (**Figure 10b**).

Fowls: עוֹף (‘ûp I), nom. bird(NIV) and fowl(KJV) is the noun for the flying animals (**Figure 10c,d**) in the first part of verse 7:14.²⁶⁶ It seems to be a generic term for flying animals (and included insects as in Lev. 11:20-23 and Nah. 3:16) in

²⁶⁴ NIDOTTE (H2651, Strong 2416, SK 2651) “חַיָּה (ḥayyâ I), living creature, animal... The nom. is not attested other than in Phoen. *hyt* and Mand. *hêwâh*, living creature, whereas the root חַיָּה and various derivatives appear frequently in Sem. languages, with a range of meanings similar to Heb. (H2649)... In the OT חַיָּה is a generic term for all sorts of animals (Gen 1:28, 30; Lev 11:2), mostly wild animals (Gen 1:24, etc.). The sense of the term is specified by adding הַשָּׂדֵה or הַשָּׂדֵה, referring to “the land animals” and “wild animals” respectively. Frequently the term appears with הַשָּׂדֵה, הַשָּׂדֵה or הַרְעָה and refers to wild animals attacking human beings or damaging land and produce as the instrument of God's punishment on human sins (Jer 27:6; Ezek 14:15, 21; 34:5; Hos 2:12 [14]; 13:8). It also appears with “birds of the air” (1 Sam 17:46; Ps 79:2; Ezek 29:5; 31:13; Hos 4:3; עוֹף, flying creature H6416).”

²⁶⁵ NIDOTTE (H 989, Strong 929) “בְּהֵמָה (b^hēmâ), quadrupeds.... It is attested in the Sem. languages: Ugar. *bhmt*; Aram. *bhm(y)th*; Arab. *bahamat*, *bahîmat*, *bihâm*. OT In the OT the nom. (188x) is used to refer to both domestic and wild animals, but mostly domestic. Its pl. form, בְּהֵמוֹת (H990), appears with special nuance in Job 40:15; normally translated *behemoth* (NIV, JPSV, NRSV), it has been variously identified as hippopotamus, crocodile, elephant, and whale.” There are others that consider it a dinosaur. See Allan K. Steel.(2001). Could Behemoth have been a Dinosaur? Ex Nihilo Technical Journal Magazine, Creation Science Foundation, Brisbane, AU. Vol.15 (2):42-45. The question of Behemoth’s tail being like a cedar seems to preclude the hippopotamus and elephant. That he eats grass “like an ox” tends to discharge the crocodile. The most likely candidates seem to be dinosaurs, but they have not been included by some as they are presumed to not have existed with man. This too is contested by some. See Taylor, P.S. (2008). Dinosaurs- Alive After Babel? Answers Magazine, Hebron, KY. Vol.3 (2):62-64.

²⁶⁶ NIDOTTE (H6414, Strong 5775, SK 6416) “עוֹף (‘ûp I), q. fly; pol. fly about; *hitpol*. fly away (H6414); עוֹף (‘ôp), nom. bird (H6416)... ANE The cognate term ‘p’p occurs in Ugar. with the same meaning.---OT 1. The vb. denotes a movement, frequently a very rapid movement... (Isa 11:14), arrows (Ps 91:5), birds (Gen 1:20),... locusts (Nah 3:16),... serpents (Isa 14:29).” Note: while Isa.14:29 allegorical in this verse a reference is made to a flying serpent—and could have implications regarding ones found in the fossil record.

Gen.6:20, 7:8, 8:17, 8:19, 9:2, 9:10; and for birds acceptable for the sacrifice in Gen. 7:3. It can be clean ones in verse 8:20.

Winged thing: עוף (‘ûp I), nom. wing, coupled with עוף (‘ûp I)^{267,268} or “chirping”—implies birds (Figure 10d). It could potentially include pterodactyls and pteranodons.

Creeping Thing: רמש. This noun is used to refer to small creeping things (Figure 10e).²⁶⁹

Kind: מין (ym) or “min” is used in reference to flora and fauna²⁷⁰ in the book of Genesis. It is found in two other books: Leviticus and Deuteronomy. It always has

²⁶⁷ NIDOTTE (H4053, Strong 3671, SK 4053) כנף (kānāp), nom. wing, skirt (of garment), outermost edge (H4053); <כנף (kānāp), ni. hide oneself, be cornered (hapleg. Isa 30:20) (H4052). **OT 1.** כנף refers not only to the wings of birds (Gen 1:21), but also of cherubim (Exod 25:20 Angels), seraphim (Isa 6:2), the creatures of Ezekiel's vision (Ezek 1:8, 24), and the winged women of Zechariah's vision (Zech 5:9).

²⁶⁸ NIDOTTE (H7606, Strong 6833, TWOT 1959a) עוף (‘ûp I), birds... Sem. cognates: Ugar. ‘sr; Akk. *iššūru, šibāru*, Aram. צפר, Syr. *šepfārā*, Arab. ‘uṣfūr.” TWOT(1959a, Strong’s 6833) means bird, especially “chirping” birds, some are clean Deut. 14:11, some for pets Job 41:5, some to represent a deity Deut. 4:17- especially as in Egypt and Mesopotamia. Yahweh is presented as hovering over Jerusalem (Isa31:5).

²⁶⁹ NIDOTTE (H8253) The nom. רמש occurs 17x in the OT, with ten of those citations in Gen. Like the vb., it functions as a Heb. classifier for living creatures, but restricts the category to small creeping animals. The word overlaps with the Heb. שרץ in that both רמש and שרץ are creatures that multiply quickly and in great numbers. However, רמש as a classification of animal life identifies primarily small creeping rodents and reptiles (creatures that move on the ground, NIV; Gen 1:24-26). By contrast, שרץ identifies primarily swarming aquatic creatures and insects (see שרץ, H9237).”

²⁷⁰ NIDOTTE (H4786) מין (mîn), kind, variety (H4786). **ANE** The etymology of מין is unknown (HALAT 547). **OT 1.** The word מין is used 31x. All uses are the same grammatically: ל (of specification) + מין + pronoun suffix. All uses are the same semantically: מין is best translated “according to its/their kind” (König, “Bedeutung,” 139) and is used in the sphere of what moderns would call the natural sciences, referring to groups of plants or animals united by common characteristics. **2.** NIDOTTE (H4786, Strong’s 4327) “Genesis. מין is used in reference to flora (Gen 1:11-12) and fauna (1:21, 24-25; 6:20; 7:14). In 1:11-12, responding to God's word, the earth produces vegetation in two broad categories (Cassuto, *Genesis*, 40), plants (עשב, H6912) and trees (עץ; H6770); each of these is in turn subdivided “according to their various kinds” (למינורו / למיניו). Similarly, in 1:20-21 God creates all marine animals

the preposition *l'* or “to or in respect to”, and appears in the singular collective form. “Min” appears to come from an Arab root meaning to “to split”.²⁷¹ It seems to be associated in some cases with reproductive capacity as both a female and male kinds are brought onto the ark in Genesis 7. The use of kind does not seem to correspond exactly with scientific nomenclature. In Gen. 1 grasses and herbs are together—of the same class. In Lev. 11:4 locusts, grasshoppers are included which would be the same family. Thus it can mean different sized groups depending on the context. But what represents a given kind within the context of scientific studies is somewhat controversial and will be further discussed in the Generalizability section.

B. ADJECTIVES AND VERBS

1. All, Upon, Prevail, Receded, Exceedingly, and Covered: What do these adjectives and verbs reveal about the account?

All: ²⁷² כָּל (kōl), it is used in the majority of cases “in a genitive relation with following word, signifying thus, ‘the whole of something.’ It is commonly translated ‘all’ if the following word is plural, and ‘every’ if the word is singular and without the article.”²⁷³ “It can also have a suffix attached to it: ‘the whole of it, all of it.’ This particular formation may then follow a given noun, stressing the aspect of totality....’ As a construct it can represent the “absolute state”.²⁷⁴ Every mountain was covered; all life with breathe in it died-absolutely.

and all winged creatures (including birds and insects, pace NIV; see Westermann, *Genesis*, 137), each “according to their/its kind(s).” And in 1:24-25 God makes all land animals in three broad categories, “wild animals” (כָּל הַחַיָּוִי הַשָּׂדֵה), “livestock” (כָּל הַבְּהֵמָה), and “creatures that move along the ground” (כָּל הַרֶמֶשׂ הַשָּׂדֵה הַרֹמֵשׂ); H8253), each ‘according to their/its kind(s).’”

²⁷¹ TWOT (1191a, Strong’s 4327).

²⁷² NIDOTTE (H3972) “כָּל (kōl), the whole, all, every”

²⁷³ TWOT (985a).

²⁷⁴ WSOT (Strong 3605) notes on construct 9.pg 2274.

Upon:^{275, 276} In Genesis 7:10, 17, 18, the waters were “upon” the earth, or “coming on” as an irresistible force ascending it. As well, it has other ancient language cognates.

Prevail:²⁷⁷ Means to be of superior strength. The waters prevailed against the earth. In Gen.7:19 it is coupled with “exceedingly”,²⁷⁸ and “upon”. It says (KJV) “And the waters prevailed exceedingly upon the earth”.... The waters overcame stepwise, forcefully and were above, exulted over the earth.

Receded:²⁷⁹ At a given time the waters began to recede from what would become the continental crust of the earth. To some Hebrew scholars there is a sense of the

²⁷⁵ WSOT (Strong 5921, 5922) means;“above, over, upon, or against (yet always in this last relation with a downward aspect).”

²⁷⁶ NIDOTTE (H6590) “עָלָה (‘*ālā*), q. go up, ascend; ni. be taken up, be exalted, be taken away, be led up; hi. bring, lead up, bring upon, make high, bring up; ho. be offered; hitp. lift oneself up.... **OT 1.** The nom. מַעְלָה is a מִקְטָל formation from the vb. עָלָה, rise, go up. Closely related semantically are the q. part. עֹלֶה, going up, ascending, and by form the nom. מַעְלָה, step, stair (BDB, 752). The vb. עָלָה occurs nearly 900x, usually to be construed in a non-theological or non-cultic manner.... **ANE** This word group is well attested in the cognate languages, such as Aram. עֲלָה, Akk. *elû*, and Ugar. ‘ly.”

²⁷⁷ NIDOTTE (H1504) “גָּבַר (*gābar*), q. be strong, accomplish, excel, swell, rise, prevail be superior;... **ANE** The root גָּבַר is found in most of the Sem. languages (Kosmala, *TDOT* 2:367). In all occurrences save for Eth. (where it means do, make), the emphasis lies on power and strength and often on excellence and superiority as well (Kosmala, *TDOT* 2:367). In Akk. *gab / pāru* occurs with the meaning overcome, subdue, vanquish, conquer, subjugate, overpower, overwhelm; vie/contend with. The Arab. *ḡabara* V means behave/conduct/deport oneself with strength. The Arab. *ḡabbār* means all-powerful.”

²⁷⁸ NIDOTTE (H4394) “מְאֹד (*m^e’ōd*), nom. power, might; adv. very, much, greatly, exceedingly, thoroughly. **ANE** Cognate forms are found in Sam. *m’d*; Ugar. *m’d, m3 d, m3’d*; and Akk. *ma’du, mfdū* (adj., much, many).” In Gen. 1:31 it is used in the context of God’s creation “behold, it was very[exceedingly] good”, and in Ex.1:7 regarding the children of Israel “waxed exceedingly mighty”.

²⁷⁹ NIDOTTE (H7725) “The turning point of the story is 8:1: “God remembered Noah ... and he sent a wind over the earth, and the waters receded.” Here the heaven-sent wind echoes the wind of God hovering over the waters before the first act of creation. And, as in **Gen 1**, there follows the progressive separation of water from the land: first the mountain tops appear, then the fresh growth of the trees, and eventually the earth was dried out.”

waters ebbing and flowing as they left what would become dry ground.²⁸⁰ This would have an impact on the appearance of the earth post-flood (See geology section on Generalizability).

Exceedingly:²⁸¹ The term is used in Genesis regarding the flood that it “rose greatly on the earth.” In the Geneva Bible—1640 version, it said, “The waters also waxed strong, and were increased exceedingly upon the earth, and the Arke went upon the waters. The waters prevailed so exceedingly upon the earth, that all the high mountains under the whole heavens were covered.”

Covered:^{282,283} “כָּסָה (*kāsā*), q. cover, conceal.” It means to overwhelm something. It is used in reference to the mountains whereas “upon” is used in reference to the whole earth. The waters overwhelmed the mountains, and the low lands were covered. But it is important to remember that the mountains or hills in the early flood period were not necessarily similar to current ones. This has been discussed above, and will be discussed in the Generalizability section on geology.

²⁸⁰ Barrick states on page 252, “The Hebrew grammar of Genesis 8:3, I will submit, supports a large-scale, back and forth, circulating motion that could have had profound effects in shaping the new landscape.” His rendering of Genesis 8:3, on page 265 reads, “Then the waters were turning back from upon the earth, going and returning, *little by little* so that they continued to decrease **at the end of those 150 days**...” In this view he echoes Kirby in his Bridgewater treatise of 1835. Mortenson, T. and T.H. Ury, eds., *Coming To Grips With Genesis* (Green Forest, AR: Master Books, 2008), 252 and 265.

²⁸¹ NIDOTTE: “מְאֹד (*m’ōd*), nom. power, might; adv. very, much, greatly, **exceedingly**, thoroughly. ANE Cognate forms are found in Sam. *m’d*; Ugar. *m’d*, *m3 d*, *m3’d*; and Akk. *ma’du*, *mfdu* (adj., much, many).” It is used as an attribute of God when He created the heavens and the earth and it was “very good.” In reference to mankind Cain became “very angry,” and Abraham became “very wealthy.”

²⁸² WSCOT (Strong 3680) Kasah: “to plump, i.e. fill up hollows,... to cover... overwhelm.”

²⁸³ NIDOTTE “(H4059) כָּסָה (*kāsā*), q. cover, conceal.... ANE The Ugar. *ksy* (*UT*, n. 1279) carries the sense of cover, cover up. The same sense is borne by the Arab. *ksw* and the Akk. *kas*. OT 1. The semantic domain of cover includes several terms, of which the most important is כָּסָה. Significant theological themes related to cover, include the covering of sins (כָּסָה)...”

C. PHRASES

1. Flesh with the Breath of Life (Gen.6:17): These words are taken together and better understood as a phrase:

רוּחַ (*rûah*), means wind, breath.²⁸⁴ It relates to the physical properties of “blowing, air in motion.” It is thought to be a “primitive noun” related to the Ugaritic *rh*.²⁸⁵ In Psalm 104:25-29 the psalmist, in describing the greatness of God, mentions all the creeping and small and great beasts that if God took away their breath they would die and return to dust. In Job 41:16 it makes the comment that the leviathan has scales so tightly connected that no *ruah* translated “air” can escape through them. Thus it probably includes those life forms in which a man could notice the process of breathing.

חַיָּה (*hayah*) means life.^{286, 287, 288} It is used as relating to physical life in many scriptures—in Gen. 2:7 God gave life to man (Adam). In the Bible it is considered a good thing—Prov.3:16, and Job’s despair is marked by his desire to no longer live—Job 3:17.

²⁸⁴ NIDOTTE (Strong7307) “רוּחַ (*rûah*), nom. wind, breath, transitoriness, volition, disposition, temper, spirit... Aram. רוּחַ, Syr. *rāh*. Similar roots are accounted for in the Ugar. *rh*, Phoen. *rh*, and the Arab. *rih*, wind, and *rûh*, spirit, which are both derived from *rāha*, to blow; cf. Eth. *rōha*, make a slight wind.”

²⁸⁵ TWOT (#2131).

²⁸⁶ NIDOTTE (Strong 2416), “In the Torah, חַיָּה; in its various forms regularly denotes “life” in the physical sense of the term. People, as well as other creatures, live, survive, and are spared from impending destruction. In several instances, both the nominal and verbal forms are contrasted to תָּמָה, die, death. Life and death are clearly viewed as opposite states.”

²⁸⁷ TWOT (#644). “The OT Word haya has a range of meaning which includes ‘to prosper,’ ‘to sustain life,’ or to ‘nourish.’”

²⁸⁸ NIDOTTE (H2649) “In the Torah, חַיָּה in its various forms regularly denotes “life” in the physical sense of the term. People, as well as other creatures, live, survive, and are spared from impending destruction. In several instances, both the nominal and verbal forms are contrasted to מָוֶת, die, death. **Life** and death are clearly viewed as opposite states.”

בָּשָׂר (*bāśār*), skin, meat (including sacrificial meat), flesh, body, humankind, animals.²⁸⁹ The root term is common in Semitic (Akkadian, Arabic, Ugaritic, Ethiopic), and means “to bring news.” Its derivative means “flesh” and appears to come from a West Semitic root. In Arabic, *basara*, it means “skin”. It is used in Leviticus 7:17 “... the remainder of the flesh of the sacrifice...” It probably refers to animals that have musculature, but can refer to the skin, Num.8:7, or the whole body-2 Kgs.4:34.²⁹⁰

Thus, when Genesis uses the terms “... destroy all flesh, wherein is the breath of life, from under heaven...,” the reader would know what is meant as these were common terms in the Old Testament. Animals, creeping or walking or flying (Gen.6:20), as representatives with “the breath of life” would be taken into the ark. I think that this clarifies what was probably not taken into it, e.g. most if not all insects. (They would not necessarily have had the ‘breath of life’ in ancient terms, and many could have probably survived outside the ark.) Fish, micro-organisms, and plants were not included (see below for further discussion of terms).

2. Under²⁹¹ the Whole²⁹² Heaven:^{293, 294} This phrase from Gen.6:17 encloses the

²⁸⁹ NIDOTTE (Strong 1320,H 1414) “בָּשָׂר (*bāśār*), skin, meat (including sacrificial meat), **flesh**, body, humankind, animals (H1414). ANE Ugar. *bšr*, **flesh**; Phoen./Punic *bšr*, **flesh**; Aram. (including Egypt., Jewish and Christian Palestinian) בָּסָר, **flesh**; Syr. *besra*, **flesh**; Mand. *besrā*, **flesh**; Eth. *bsr*, **flesh**; ESA *bšr*, **flesh**; Arab. *bašarat*, skin.”

²⁹⁰ TWOT (#291a,b).

²⁹¹ NIDOTTE “(H9393) תַּחַת (*taḥat* I), below, **under**.”

²⁹² NIDOTTE “(H3972) כֹּל (*kōl*), the **whole**, all, every.” This word is used throughout the book of Genesis. In Gen.1:21, God created “every” or the “whole” of the moving things. In Gen. 3:20 Eve was the mother of “every” or the “whole” of the living [mankind].

²⁹³ NIDOTTE “(H9028) שָׁמַיִם (*šāmayim*), **heaven**, sky, firmament, air.”
... “*Idiomatic expressions*. The expression ‘between earth and heaven’ means ‘in the air’ (2 Sam 18:9, etc.; see E. Levine, ZAW 88, 1976, 97-99). Also the expression ‘under the heaven’ refers to the whole earth (Dan 9:12; also Deut 2:25; 4:19; Job 28:24; 41:3). Hence to destroy “from under heaven” (Gen 6:17, etc.) means total destruction. Also, the phrase “as the heavens are higher than the earth” expresses

concept of the entire earth. To the Hebrew mind there was a bipartite concept of the totality of creation being composed of the “heavens” and the “earth”. Thus the language of the flood story is consistent with the totality of the entire earth being flooded.

3. Destroy²⁹⁵ them with the earth²⁹⁶ (Gen. 6:13) is used both of the corruption of mankind and the pronouncement of God to destroy them and the earth.

a sharp contrast (Isa 55:9), greatness (Ps 103:11), or unsearchability (Prov 25:3). Note that Eccl uses “**under heaven**” (Eccl 1:13; 2:3; 3:1) 3x for the usual idiom “under the sun” (29x; all in Eccl).” [Bold lettering added by this author.]

²⁹⁴ In NIDOTTE the commentary on the word commonly translated “end” has relevance to the Hebrew perspective of the phrase “under heaven.” (H7894): “A common use of the nom. is in the phrase ‘end of the earth.’ Usually the phrase means the most distant part of the world (cf. Ps 61:2 [3]).”... “Elsewhere, the term is used with cosmological significance. In Jer 49:36, the four ends of the heavens are the sources of the winds that God will bring as a judgment on Elam. The nom. is also used in the expression ‘the ends of the earth,’ i.e., the remotest parts of the diaspora, from whence God calls Israel, his servant, in Isa 41:9 (see also v. 5). **In Job 28:24 the expression ‘the ends of the earth’ means not its extremities but its entirety, since the expression stands in parallelism with ‘everything that is under heaven.’** Probably this usage is an example of metonymy, the ends signifying the whole. The same meaning is likely found in Isa 40:28, where the Lord is called ‘the Creator of the ends of the earth,’ i.e., the whole world.” [Bold lettering added by this author.]

²⁹⁵ NIDOTTE (H8845) “שָׁחַת (šāhat), ni. become **corrupt**, spoil; pi. wipe out, spoil, ruin, cause trouble; hi. spoil, ruin, destroy; ho. spoiled, ruined (H8845);... nom. destroyer, destruction, bird trap.... **3.** The thorough devastation that tǝv; denotes makes it apt vocabulary for pronouncements and descriptions of divine judgment. This vb. is used for the destruction of all flesh and all the earth (pi., Gen 6:17; hi., 6:13; pi., 9:11, 15), Sodom and Gomorrah (pi., 13:10; 19:13, 29; hi., 19:13-14), Babylon (hi., Jer 51:11), and Tyre (pi., Ezek 26:4 [par. sr"ħ;]).”

²⁹⁶ NIDOTTE (H824) “אֶרֶץ (‘eretz) (earth) “ **A. The Earth. 1. Universality and sovereignty.** Though it is not always clear whether אֶרֶץ means “earth” or “land,” the expression כָּל-הָאָרֶץ frequently means the whole **earth**, rather than just “the whole land” (cf. Gen 1:26; 11:4, 8, 9; Ps 8:1 [2], 9 [10]). Combined with “heaven(s),” שָׁמַיִם, the phrase “heaven and **earth**” expresses the totality of the created order, as the opening verse of the Bible summarily expresses it (Gen 1:1; cf. 2:4). As creator, Yahweh is thus the universal God of heaven and **earth** (Gen 14:19, 22; 24:3; Ps 102:19 [20], 25.”

D. SUMMARY FOR DETERMINANCY

It is clear from a word study of the Noah Flood account:

1. Words were used for “the flood” and “ark” that are unique in their use in the Bible.
2. There are other common words for “earth, heavens, and waters”.
3. The words for “all”, “cover”, and “exceedingly” give the sense of covering the entire earth- with water. The phrase “from under the heaven” augments this idea as does the phrase “wiping the earth as a bowl” in destruction.
4. Animal groupings are those known to these people.
5. Concise dimensions and descriptions are given of the physical structure of the ark.
6. There are connections between many of the words used in it, the Flood Story, and other ancient linguistic groups such as the Ugartic and Akkadian language groups. This will be discussed further in the Discussion section. As well, there are those Bible scholars who believe that an understanding of a portion of the scriptures cannot rest solely on etymological analysis but must be “founded upon the sounder semantic clues provided by phraseology, literary devices, and context- the collective impact of the entire narrative.”²⁹⁷ Some of these concepts will be further discussed in the Connectedness section of this writing.
7. Most importantly, the story was written in an ancient language(s) known to have been in the area, and in words/concepts that the common person, if educated, could have understood.

²⁹⁷ Barrick, W.D., *Noah's Flood and Its Geological Implications in Coming To Grips With Genesis* ed. Mortenson, T. and T.H. Ury, 2008, page 260.

See Volume 2 Figures

Determinancy

CONNECTEDNESS

INTRODUCTION

The second characteristic of a TNR is that of connectedness. A definition that Oller developed and Briggs further refined is, “Connected means that the content of the sign is determined in space and time,”²⁹⁸ and the “components of the narrative are connected by the cognitive and linguistic faculties of the observer/narrator to the events that make up the episode.”²⁹⁹ The structure of a true narrative account will be so structured that there will be a clear linearity to the sequence of individual aspects of the whole account. There are two prevailing views as to the literary structure of the Flood account: that it was written by a single author or as a composite by several authors.³⁰⁰

A. Literary structures that are supportive of a single author composition of the Noah flood story are listed below. The idea of a single unified presentation would be more supportive of a true narrative account :³⁰¹

1. **Palistrophic arrangements**³⁰² which include **chiastic**^{303,304,305} or **concentric parallelism**³⁰⁶.

²⁹⁸ J. Oller, "Toward a Theory of Technologically Assisted Language Learning/Instruction," *CALICO Journal* 13(4) (1996), <http://www.calico.org>.

²⁹⁹ P. Briggs, *Testing the Factuality of the Conquest of Ai Narrative in the Book of Joshua*, *Academic Monograph Series No. AR-1*, Institute of Archeology and Biblical Histroy (Albuquerque, NM: Daystar Publications, 2001), 22.

³⁰⁰ V.P. Hamilton, ed., *The New International Commentary on the Old Testament*, vol. 1, *The Book of Genesis Chapters 1-17* (Grand Rapids, MI: W.B. Eerdmans Publishing Co, 1990), 11-38.

³⁰¹ The Genesis flood account appears to have been written from one viewpoint. If there was more than one account of it and there were any significant differences, and not just different aspects, within those accounts it would imply a degeneracy of at least one or more of the accounts (depending on the number). Then if the final account was a composite of those several accounts it would again further remove the story from its origin structure. On the other hand, if it was an intact account simply put as a unit into a collection of other accounts, in the book of Genesis, its integrity as the report of an eye witness account would not be violated.

³⁰² G. Wenham, "The Coherence of the Flood Narrative," in *I Studied Inscriptions from the Before the Flood*, ed. Hess, R.S. and D.T. Tsumura (Winona Lake, IN: Eisenbrauns, 1994), 436-447.

2. **Geneologic Inclusio.**^{307,308}
3. **Repetitio mater studiorum.**³⁰⁹
4. **Purposeful Textual Discontinuity** (with a change of time/subject).³¹⁰
5. **Verb tenses reflecting time sequencing.**³¹¹
6. **Contemporary Discourse Analysis.**³¹²

³⁰³ D.L. Christensen, "The Pentateuchal Principle within the Canonical Process," *JETS* 39/4 (1996):537-548.

³⁰⁴ B.W. Andersen, "From Analysis to Synthesis: The Interpretation of Genesis 1-11," in *I Studied Inscriptions from Before the Flood*, ed. Hess, R.S. and D.T. Tsumura (Winona Lake, IN: Eisenbrauns, 1994), 416-435.

³⁰⁵ E.W. Bullinger, ed., *The Companion Bible* (1909), CD ebook from Graceworks Multimedia Ebooks at " stores.ebay.com/GraceWorks-MM/ (accessed 2008).

³⁰⁶ On page 105 -106 Kitchen discussed parallelism in which he compared the Psalms to that of some ancient Egyptian writings and showed that there is a concentric structure to them. He stated, " Third, we examine how the usages of biblical psalmody (Davidic or otherwise) fit into the Near Eastern cultural context. The forms and conventions of biblical poetry, so familiar in the Psalms, go back in origin two thousand years before David's time. Exactly as in Sumarian, Akkadian, Egyptian, and other West Semitic literature (e.g. Ugaritic), so in biblical Hebrew poetry the basic building block is the two-line couplet (or 'bicolon'), foundation stone of poetic ' parallelism.' It can be concentric with the first part being synonymous- repeating identical concepts, synthetic- with a thought extended, or antithetic- two contrasting thoughts." Several other authors in this section refer to the parallelism seen in Genesis—see also Kikawada and Quinn, Shea, and Wendam. A. Kitchen, *On the Reliability of the Old Testament* (Grand Rapids, MI: William B. Eerdmans, 2003), 105-106.

³⁰⁷ W.H. Shea, "The Structure of the Genesis Flood Narrative and Its Implications," *Origins* 6:1 (1979), 8-29, <http://gridsa.org/origins/06008.htm>. (accessed 2008).

³⁰⁸ D.W. Baker, "Diversity and Unity in the Literary Structure of Genesis," in *Essays on the Patriarchal Narratives*, ed. A.R. Millard and D.J. Wiseman (Winona Lake, IN: Eisenbrauns, 1983), 197-215.

³⁰⁹ The purpose of this literary format was explained by C. Carmichael. He was quoted, "The frequent repetition of rules for sacrifice and worship does not suggest a heterogeneous code of rules, composed at different times and places, but rather reflects a setting of instruction. Matters are repeated, especially in this opening part of instruction, in order to fix the teaching in the mind of the hearer." I.M. Kikawada and A. Quinn, *Before Abraham Was* (Nashville, TN: Abingdon Press, 1985), 93.

³¹⁰ Baker, *Literary Structure of Genesis*, page 197.

³¹¹ S.W. Boyd, *Radioisotopes and the Age of the Earth*, ed. L. Vardiman, Andrew A. Snelling and E.F. Chaffin, *Statistical Determination of Genre in Biblical Hebrew* (El Cajon, CA and Chino Valley, AZ: Institute for Creation Research and Creation Research Society, 2005).

³¹² R.E. Longacre, "The Discourse Structure of the Flood Narrative," in *Society of Biblical Literature 1976 Seminar Papers One Hundred Twelfth Annual Meeting held in St. Louis, MI, October 28-31*, ed. G. MacRae (Missoula, MT: Scholars Press, 1976), 235-262.

7. **Unity of structure within Genesis and Other Parts of Scripture.**^{313,314}
8. **Toledot Theory.**^{315,316,317}
9. **Continuity Between the Old and New Testament of the Bible.**³¹⁸

Each of these literary structures will be discussed below:

1. **PALISTROPHE:** Wenham defined it as “In a palistrophe the first item matches the final item; the second item matches the penultimate item, and so on. The second half of the story is thus a mirror image of the first.” He stated that Gen. 6:10-9:19 contained 31 items- 15 reflected upon the other 15 with a transition verse.³¹⁹ Webster’s Dictionary described a chiasmus (or chiastic structure) as ‘an inverted relationship between the syntactic elements of parallel phrases.’³²⁰ Carroll in his study of the book of Amos stated the “notion that the book of Amos, in its parts and as a whole exhibits chiasm (alternatively called symmetric, inverted, palistrophic, ring, or concentric patterns).”³²¹ These appear to be interchangeable literary terms for the same structure.

³¹³ These authors demonstrated a 5 part structure of unity in Genesis 1-11 that was repeated in other parts of the Bible. Kikawada and Quinn, *Before Abraham Was*, 123.

³¹⁴ W.H. Green, *The Unity of the Book of Genesis* (Grand Rapids, MI: Baker House Publishing, 1895, reprint 1979).

³¹⁵ D. Livingston, "From What did Moses Compose Genesis," *Associates for Biblical Research*, 2005, <http://www.biblearchaeology.org/post/2005/12/From-What-Did-Moses-Compose-Geneology>.

³¹⁶ C.J. Collins, *Genesis 1-4* (Phillipsburg, NJ: P and R Publishing, 2006), 36.

³¹⁷ Shea emphasized the use of the toledot to demarcate the successive generations. D.S Shea, "The Generations of Genesis," *Bible and Spade* 6:2 (1977):33-48.

³¹⁸ T. Mortenson and T.H. Ury, eds., *Coming to Grips with Genesis* (Green Forest, AR: Master Books, 2008), Chapters 11 and 12.

³¹⁹ Wenham, *Coherence of the Flood Narrative*, 436.

³²⁰ *Webster's Ninth Collegiate Dictionary*, 9th ed., s.v. "chiasmus."

³²¹ R.M.D. Carroll, *Amos-The Prophet and His Oracles* (Louisville, KY: Presbyterian Publishing Company, 2001), 45.

Wenham in his expose started with Gen. 6:10 and ended with Gen. 9:19.³²² The turning point was Gen. 8:1”and God remembered Noah.” Before that the flood built up and after that it decreased. It started with Noah and ended with him. Time (in days) also formed a symmetry: 7,7;40;150,150;40;7,7. Thus there was a palistrophic structure within the larger one from Gen. 6:8-9 to Gen. 9:19.³²³

Parallelism is seen in Gen. 6:5-7 and Gen. 8:21,³²⁴ which is considered a subclass of palistrophic structures.

The structure of the palistrophe is a natural linguistic structure in which to describe the flood account—with the rising up of the waters and the apex (of God remembering Noah) and the falling off of the waters.³²⁵

Bullinger in his *The Companion Bible* (1909) recognized the palistrophic structure of Gen. 6:9 to 9:29 (**Figure 1**). The pyramid structure is within the verses of 7:1-24 when Noah entered the ark, and 8:1-19 when he departed it. The structure is symmetric.³²⁶ Anderson and Cassuto came up with similar constructions.³²⁷

Kikawada noted the palistrophic forms in the flood narrative, Gen. 11:1-17 regarding the tower of Babel, and Gen. 11:31-12:3 with Abram’s call.³²⁸ As well, Christiansen commented on the chiastic structure being found within sections of scripture, books of the bible, and the Old Testament as a whole. He stated “ The curious thing, as shown in the discussion to follow, is that this same five-part structuring principle seems to operate in turn at each successive level in the

³²² Wenham, *Coherence of the Flood Narrative*, 438.

³²³ Ibid, 441.

³²⁴ Ibid, 441.

³²⁵ Ibid, 440.

³²⁶ Bullinger, *Genesis*, 1.

³²⁷ Quoted in W. H. Shea, *The Structure of the Flood Narrative*, *Origins* 6:1 (1979) 11.

³²⁸ Kikawada and Quinn *Before Abraham Was*, 73, 96, and 104.

canonical process: for Genesis 1-11, for Genesis as a whole, for the entire Pentateuch, for the OT (the HB), and for the Christian Bible (OT plus NT).³²⁹ For an example of the five part chiastic structure he used:

- A) Creation(ending with the three sons of Adam) Gen. 1-4;
- B) Enoch Gen. 5;
- X) The sons of God and the daughters of ha-adam Gen. 6:1-4
- B') Noah Gen. 6:5-9:29. ;
- A') Dispersion (beginning with the three sons of Noah) Gen. 10-11.

Hoffmeir in his book on Egyptian history referred to the palistrophic structure of Joshua's conquest from Joshua 10: 28-42 with the sequence:

- A) Took,
- B) fought,
- C) smote,
- D) siege and assault,
- E) smote him, then
- D') siege and assault,
- B') fought,
- C') smote,
- A') took.³³⁰

He went on to ask the question about what if there is such symmetry to what appeared to be a historical narrative, is it truly an historical account? He quoted Fishbane, " Surely these phonemic/semantic meanings add to the historical ' fact' of the composition and bring out more forcefully that in the Hebrew Bible historical narrative is always narrative history , and so is necessarily mediated by language and its effects. It is thus language in its artistic deployment that produces

³²⁹ Christiansen, *The Penteteuchal Principle*, 540.

³³⁰ J.K. Hoffmeir, *Israel in Egypt* (Oxford, England: Oxford University Press, 1996), 37.

the received biblical history—a point that must serve to deflect all historicist reductions of these texts to ‘pure’ facts.” Hoffmeir further amplified this, “the literary nature of the military narratives (i.e. *in Joshua*) does not preclude the essential historicity of this body of literature.”³³¹ Repetitive linguistic forms are common throughout the Old Testament books, and the ancient writings of the near east.³³²

Gunkel, who adhered to the documentary hypothesis (see below), noticed the repetitive structure in the Genesis accounts of creation and the flood, and considered them to be of the structure of a legend and thus poetry. But it was how he defined the concept of a legend that caused him to consider the creation and the flood account as poetry and not so much the repetitive structures themselves. (Legends were discussed in the Methods section.)³³³

Parallelism, a subgroup, does not present a mirror image but does repeat the basic information as doublets, triplets etc. Cassuto noted that the terms for God of *Elohim* and YHWH in the Genesis account referred to different relationships or functions of God.³³⁴ As well, there was developed a symmetry of 10 generations between Adam and Noah, and Noah and Abraham.

³³¹ Ibid, 38.

³³² K. A. Kitchen, *On the Reliability of the Old Testament* (Grand Rapids, MI: W.B. Eerdmans Publishing Co, 2003), 170.

³³³ H. Gunkel, *The Legends of Genesis* (New York: Schocken Books, 1964), 81,3-4,74-75.

³³⁴ The author commented on the uses of the two forms of the name of God as, "It [the scriptures] selected the name YHWH when the text reflects the Israelite conception of God, which is embodied in the portrayal of YHWH and finds expression in the attributes traditionally ascribed to Him by Israel, particularly in His ethical character; it preferred the name *Elohim*, when the passage implies the abstract idea of the Deity prevalent in the international circles of "wise men"—God conceived as the Creator of the physical universe, as the Ruler of nature, as the Source of life. . . . The name YHWH is employed when God is presented to us in His personal character and in direct relationship to people or nature; and *Elohim* when the Deity is alluded to as a Transcendental Being who exists completely outside and above the physical universe." U. Cassuto, *The Documentary Hypothesis and the Composition of the Pentateuch* (Jerusalem: Shalem Press, 2006), 37.

Thus, if the chiasmic structure of the flood narrative is placed on a timeline a unity of flow of the narrative is discerned—especially with the rising and falling of the waters (**Figure 2**).³³⁵

In conclusion, the palistrophe was a common literary structure used in ancient near east documents, and was often used in what appear to be narrative documents. It appears to have been used in the Noah flood account.

2. **Geneologic Inclusio:** William Shea applied this literary structure to the flood account.³³⁶ The story was contained within the primary inclusio of Gen. 5:32 with Noah's birth age and his three sons, and Gen. 9:28-29 which recorded his death. This connected the genealogies of Gen. 5 and Gen. 10. Shea went on to connote Gen.6:1-8 and Gen. 9:20-27 as the prologue and the epilogue of the story. Longman and Garland made a similar comment in their commentary on Genesis.³³⁷

Shea's next step was the secondary inclusion, Gen. 6:9-10 and 9:18-19, which served to demarcate the prologue and epilogue from the main body of the narrative. The first was composed of generations of Noah and the second those who left the ark. God then covenanted with Noah before the flood (6:18) and afterwards (9:9, 9:11-13, 9:15-17).

In conclusion, the Geneologic Inclusio is defined as a structural literary unit having a beginning and an ending clause. The Noah flood account has such a structure.

³³⁵ W.D. Barrick and R. Sigler, "Hebrew and Geologic Analysis of the Chronology and Parallelism of the Flood: Implications for Interpretation of the Geologic Record," in *Proceedings of the 5th International Conference on Creationism*, ed. R.L. Ivey (Pittsburgh, PA, 2003), 397-408.

³³⁶ W.H Shea, "The Structure of the Genesis Flood Narrative and Its Implications," *Origins* 6:1 (1979):8-29.

³³⁷ T. Longman and D.E. Garland, eds., *Expositor's Bible Commentary* (Grand Rapids, MI: Zondervan, 2008), 109.

3. *Repetitio mater studiorum*

Kikawada and Quinn commented that “repetition, after all, is one of the most fundamental tools of the literary artist, either oral or written. And this was why the Greek and Roman rhetorical traditions developed such an elaborate terminology to classify the different kinds of repetition: *Repetitio mater studiorum*.”³³⁸ They went on to quote Robert Alter that in the Hebrew it, *repetitio mater studiorum*, functioned first as a statement of the prophetic future, and then secondly as an accomplished fact or as an expansion of the prophecy.

Charmichael was quoted; “Matters are repeated, especially in this opening part of instruction (i.e. the Law), in order to fix the teaching in the mind of the hearer.”³³⁹

They cite other near eastern literature regarding this as an example of a double commentary on an event. In the story of Enkl and Ninmal from the Sumerian creation story, the first part is comprised of: the gods are having to do work and they complain bitterly. Nammui goes to Enkl and informs him. She suggests that he fashion substitutes for the work. He makes humans after himself. The gods rejoice with a party. In the next part Enkl and Ninmal get drunk at a party. Ninmal proposes a contest; she will make creatures and Enkl decrees their fate. Enkl then suggests that he make the creatures and Ninmah decree their fates. In the process he makes woman, impregnates her, and a helpless form (baby like) results—called Umul. Kikawada concluded that the first part comprised the general form of the creation of man, and the second a more specific representation of the process of reproduction.^{340,341}

³³⁸ Kikawada and Quinn, *Before Abraham Was*, 93.

³³⁹ *Ibid*, 85.

³⁴⁰ *Ibid*, 39.

³⁴¹ Please note the base, crude behavior of the Sumerian gods- in sharp contrast to the Holy God of the Hebrews. The import or significance of the Creation and Flood accounts is strikingly different between these two societies. This will be discussed later.

As with the palistrophe the use of the repetitive literary structures were common in the Middle East, and the Noah flood account appears to have been composed of such a structure.

4. Purposeful Textual Discontinuity

Baker has pointed out that there appear to be purposeful breaks in continuity in Genesis—primarily relating to time and change of subject. In the flood narrative the “progress of time” was demarcated by indicating an onset of events, such as the age of Noah. He commented that “Anderson noted that ages are often indicated as time references marginal to a story either at the beginning or the end, or else between episodes within a story.”³⁴² Time was further separated by a change in verb form- *way^e hi*. This often reflected a lapse in time. In the flood story there were absolute time indicators as well, which has lent overall structure to it.³⁴³

Changes in subject matter such as the introduction of a geneology, and different venues are used as well to separate divisions.³⁴⁴ This is seen in other ancient Middle East texts.

He, Baker, concluded in his text that “There is nothing out of the ordinary in the structure of the book [i.e. Genesis] which might indicate that it is a heterogeneous amalgam of originally separate sources which have been melded, at times leaving evidence of crude joins, as some have proposed. As far as the matters discussed in

³⁴² Baker, *Literary Structure of Genesis*, 200.

³⁴³ This author nicely graphed the time sequencing of the flood narrative in Genesis. W.D Barrick, "Noah's Flood and Its Implications," in *Coming to Grips With Genesis*, ed. Mortenson, T. and T.H. Ury (Green River, AR: Masters Books, 2008), 273.

³⁴⁴ Baker stated, “A change in subject matter can be an obvious indicator of a discontinuity in the text. A passage giving the family tree of Noah’s sons (Gen. 10) is clearly distinct from one concerned with the building of a town (Gen. 11:1-9).” And he gave other examples. Baker, *Literary Structure of Genesis*, 202.

this paper are concerned, Genesis appears to be a well-structured literary document.”³⁴⁵

5. Verb Tenses

A verb “expresses an act, occurrence, or mode of being”³⁴⁶It connects the objects composing the nouns and adjectives of Determinancy.

Finite verbs: In a defining study Dr. Steven Boyd has been able to show that in the construction of the Genesis and other scriptures there is a definite trend in the types of verbs used in poetic vs. narrative sentences. He looked at the use of the finite verbs : preterite, imperfect, perfect, and waw-perfect. These are verbs that carry the main action; inflect person, gender, and number. The preterite is important in that it indicates sequential past action, and as such would most likely be used in a narrative account. The others such as the imperfect indicates present / future action; the perfect non-sequential action; and the waw-perfect habitual action in the past.³⁴⁷

In one study he looked at what are called paired texts, where a subject matter is written once in what is considered as narrative and then elsewhere in the poetic form. One example is Exodus 14(narrative), and Exodus 15:1-19(poetic). The narrative used the preterite form of verbs 55 % vs 45% for the other 3 forms together. In Exodus 15, the poetic form used the imperfect and perfect forms over 80% of the time and the preterite only less than 5% of the time. He surveyed 295 narrative and 227 poetic texts for their verb content. Passages were taken from all the subgroups of the OT. In those sections thought to be narrative in composition

³⁴⁵ Ibid, 214.

³⁴⁶ Webster’s Ninth New Collegiate Dictionary (1988) Merriam-Webster Inc Publishers, Springfield, MA

³⁴⁷ The waw-perfect will be discussed, as well, in Contemporary Discourse Analysis (next section).

the use of preterite to total finite verbs was 52% (if random usage then the expected percent would have been 25%). In those passages thought to be poetic the use was less than 5%. When looking at the flood account it fell into the narrative category. Using logistic regression the probability that Gen.1:1-2:3 is a narrative is 0.9999%, and the profile of verbs in Gen. 6-9 appears very similar to it.³⁴⁸

6. Contemporary Discourse Analysis

This form of analysis attempts to read the ancient literary document as the original audience would have.³⁴⁹ An assumption is that the original author displayed intention by the text he wrote. This is called by Collins the ‘conservative approach’ in contrast to the ‘modern’ which is more concerned about how the text came to be, and the ‘post-modern’ where the text is simply what the reader or community of readers get(s) out of it personally.³⁵⁰ This technique focuses on the communication by the written text of the author with his audience. It assumes that he and they had something that they shared- culture, religious beliefs, language etc. The text was meant to produce an effect in the audience—the author’s world and the audience’s overlapped but were not identical, and the author communicated within that realm something he wished to reveal. Discourse Analysis studies how ancient texts accomplished this communication. Collins notes that even very early writings such as Aristotle’s differentiate between poetry and narrative.

In his book analyzing Genesis 1-4 he stated that the Pentateuch was about the Mosaic Covenant, that its purpose was to constitute Israel as a theocracy, and that

³⁴⁸ Boyd *Statistical Determination of Genre in Biblical Hebrew* page 653 and 690.

³⁴⁹ Collins *Genesis 1-4* page 5. He stated, ” In this chapter I will describe the method I intend to use in studying these biblical passages. In the method I aim to achieve ‘ancient literary competence’: that is, I seek to read the text the way a competent reader in the original audience would have done so, to the best that we can reconstruct that competence.”

³⁵⁰ *Ibid*,10.

the covenants in it were built upon sequentially rather displaced by each other. This was so that God could set the stage for a Holy Nation and a Kingdom of Priests, a treasured people so that He could work through them and they be a blessing to the world.

Collins argued for a unity of Genesis 1-4. In his first analysis he dissected Genesis 1 and 2. He divided them into periscopes of Gen. 1:3 to 2:3, with Gen. 1:1-2 as an introduction. He found that narrative chapters tended to use the *wayyiqtal* verb tense. This portion of scripture he called “exalted prose narrative”. It emphasized a certain attitude, even though it described a true event. Gen. 2:4 he considered a chiasmic structure that hinged the first chapter with the second chapter or pericope. He viewed chapter one as a more global event, whereas in chapter two the focus was on man and his specific relation with God. Thus it presented a unified whole picture rather than a piecemeal of two separate accounts as some others have read it.

Longacre, in 1976, used this same technique to analyze the Noah account of the flood.³⁵¹ He commented “contemporary discourse analysis is interested in the question of genre classification, e.g., the nature of distinguishing a narrative discourse from other sorts of discourses such as procedural, behavioral, expository,... It is being increasingly realized that the study of isolated sentences out of context is scarcely worth being called the study of language.”³⁵² He mentioned that the flood story “is part of the continuous ongoing narrative of Genesis, and as such, of course, has certain characteristics of embedded narrative...characteristics which betray that it belongs to something larger.”

³⁵¹ Longacre, *Contemporary Discourse Analysis*, 235-262.

³⁵² *Ibid*, 235.

He assigned Gen. 6:1-4 as the “inciting incident” which led to God’s bringing the flood on mankind; Gen.6:5-8 is a preview of the story; the toledot 6:9 “generations of Noah” as the proper onset of the story; and the end was assigned to Gen.9:1-17 when God spoke with Noah after the flood. He recognized this as

somewhat arbitrary, but that the story was viewed as having a beginning and an end. He demarcated it according to the crescendo/decrecendo pattern of the flow of water in the story. He noted that, “The backbone of this narrative is carried here as in Hebrew prose narrative in general by the waw plus prefixal verb—which is increasingly recognized as a special narrative tense for Hebrew.”³⁵³ He emphasized that this verb is used in the primary line, “event line”, of the narrative and not those of “circumstantial clauses” which could add detail but are not of the main story line. This particular verb carries through the entire flood account.

He concluded by stating, “I have attempted to show in this application of contemporary discourse study to the flood account that the text of the flood story as it stands has a consistent and plausible discourse structure, that the variations in style found in certain parts of it are appropriate to the distinctions of the subject matter... I have also attempted to show that repetitive allusions to the same event... far from being evidence of more than one documentary source... are either (1) cohesive features which contribute to the unity of the discourse, or (2) features of parallelism and paraphrase which mark the prominence of the peak... Especially, I have attempted to clarify the paragraph structure of this account, both in terms of the thematic(principle) participants... [and] general progress and development within each paragraph. Thus even the variations in divine names between Elohim and Yhwh seems not to be a matter of editorial patchwork, but seems to tie in to the matters of whether or not the deity is thematic in a given paragraph... dates and chronology... are an integral part of the mechanism of introducing and closing paragraphs and maintaining discourse flow.” He finally

³⁵³ Ibid, 236.

concluded: “It can, therefore, be rationally contended that the application of contemporary discourse study to this portion of Genesis makes the assumption of divergent documentary sources unnecessary and that such an assumption obscures much of the truly elegant structure of the story.”³⁵⁴

7. Unity of Structure of Genesis with Other Portions of Scripture in the Old Testament

Kikiwada has made the observation that: “The primeval history of Genesis does not impress the modern reader as a unified literary work, even a reader who has never heard of the documentary hypothesis. It seems to be a number of loosely connected tales, with genealogies intruding here and there. We can find certain overlapping themes and styles. But the primeval history as a whole appears to be more a collection of narratives than a single narrative. This is, of course, only the impression made on a modern reader. Ancient Near Eastern readers or listeners might have responded quite differently. They might have seen a unity that eludes us; the primeval history of Genesis might presume a kind of sophistication no longer common.”³⁵⁵ He went on to show similarities of linguistic structure between ancient Sumerian flood stories and Genesis. As well, he then demonstrated similar thematic structures between Genesis 1-11 (thought to be poetry by some) and the books of Samuel and Kings (acknowledged by most to be narratives). For example (to summarize his comments):

<u>Genesis 1-11</u>	<u>Books of Samuel and Kings</u> ³⁵⁶
<u>Adam/Eve</u>	<u>David and Bathsheba</u>
- Forbidden fruit	- forbidden sex with another’s Wife
- Sin	- sin
- Death sentence, not executed	- death sentence, not executed

³⁵⁴ Ibid, 258.

³⁵⁵ Kikawada and Quinn, *Before Abraham Was*, 36.

³⁵⁶ Ibid, 108-9.

Noah and the Flood

- Generation of evil
- Noah finds favor with God
- God intervenes for Noah
- God blots out corrupt
- God promises new beginning
- Noah gives blessings and curses

Rebellion of Absalom

- Absalom brings evil on dynasty
- David finds favor with God
- God intervenes for David
- God blots out Absalom
- New beginning for David
- David blesses enemies and friends

His point is that there may have been a formatting of historical documents which has occurred throughout the Old Testament, and that readers of that time would recognize, and would not view as fragmentary documents.

Several things are clear from these scriptures: 1) Noah was considered a real man in both the Old and New Testaments. He is in the lineage of other historical figures of the Bible. 2) He (with his family) is referred as having gone through a flood that destroyed the rest of mankind. This was discussed in the Determinancy section as well. 3) There are indicators that are supportive of a universal flood in these accounts. God judged all the angels that sinned not just a few as He judged all mankind except eight in the flood. Both the Old and New Testament take this view- separated by 2000-3000 years of written testimony. Thus there is a connectedness of a continuity of the recording of the account throughout the Bible; and this is found in both prophetic, law, historical, and apostolic writings.

8. Toledot

While some would include the toledot under the geneologic inclusio or the purposeful textual discontinuity, it is a unique literary structure. It means— ‘generations’, and is found repeatedly in the book of Genesis. It divides Genesis into ten subsections after the prologue of Genesis 1:1-2:3. Some have felt that it may be the format resulting from the copying/compiling of written documents, i.e.

cuneiform, that Moses would have had available. Cuneiform tablets often had a colophon indicating what the tablet contains. The phrase “these are the generations” could have been such an element.^{357,358} Collins comments, “that ‘these are the generations of’ (... ‘elleh toledot’) is a recurring feature in Genesis: besides 2:4, it appears in 5:1; 6:9; 10:1; 11:10,27; 25:12; 19; 36:1; 37:2. In these other cases, it functions as a heading that introduces new material.”³⁵⁹

Others believe it to be a literary formula for structuring the book of Genesis and emphasizing that the Patriarchs were real and important people.³⁶⁰ Leon Kass, a Jewish philosopher, emphasized that “The line of Adam and Seth, simpler and gentler, contains no inventors or warriors; its most distinguished members are somehow closer to God” in contrast to Cain’s line which “is self-reliant; it boasts the first city, inventors of the arts, and a man(Lamech) who proudly sings his triumphs in dispensing violent death.” He viewed these as real people, representing two separate lines of humans, having strikingly different moral bearings- at least initially.³⁶¹

Overall, the above scholars and others have stated that the use of the toledot adds an organization and continuity to the book of Genesis.

³⁵⁷ DeWitt, *The Generations of Genesis*, 33-48.

³⁵⁸ D. Livingston, *From What Did Moses Compose Genesis?* (by the author, 2005), www.biblearcheology.org/ (accessed June/18/2010).

³⁵⁹ Collins, *Genesis 1-4*, 40-41.

³⁶⁰ Baker, *Diversity and Unity*, 208.

³⁶¹ L.R Kass, *The Beginning of Wisdom Reading Genesis* (Chicago: Univ. of Chicago Press, 2003), 153.

9. Continuity Between the Old and New Testaments of the Bible

There is a commonality of testimony and perspective regarding the Noah flood account that is seen between the Old and New Testaments. It was recorded by several authors over a 1600-3000^{362, 363} year span of time, and then carefully conserved for another 2000 years.^{364, 365}

Within the New Testament the following references are made of Noah within two books of the gospels, the writings of Paul, Peter, and the writer of Hebrews:

- 1) Matthew 24:27-39 In these passages Jesus made reference to Noah, and that the conditions of mankind would be similar at the coming of the Son of man as in the days of Noah. It also made note that His coming would be as the "lighting cometh

³⁶² Moses in this present writing and among many scholars is considered the author of Genesis (see discussion in this writing). But it is highly likely that he drew upon older documents for compiling parts of Genesis, i.e. the Flood account (see A. Clay 1922). If the exodus was in the 15th century B.C. then the compilation of the book of Genesis would have occurred at that time, but the source documents would probably go back to the 3rd millennium B.C. to the common source for both the Mesopotamian stories and the Biblical one. The books of Peter would have been composed in the 1st century A.D.

³⁶³ The Bodmer Papyrus is dated to 175-200 A.D. It contains both 1st and 2nd Peter. R. Price, *Searching for the Original Bible* (Eugene, OR: Harvest House Publishers, 2007), 79.

³⁶⁴ Ibid, On page 64-65 Price stated, "The most significant single contribution of the scrolls has been their witness to the earliest known text of the Hebrew Bible. In the case of the latest Minor Prophets, the Dead Sea manuscripts witness to a text within only a couple of generations of the original text itself, a situation comparable to the earliest (second-century) papyri of the New Testament... Before the discovery of the scrolls the oldest Hebrew text was the tenth-century Aleppo Codex, which contained the *Masoretic* Text. Despite its antiquity, it was still 1300 years removed from the latest book composed by a biblical writer (c. 425 BC)... all doubts (about accuracy in transmission) were laid to rest with the discovery in Cave 1 of a copy of the entire book of Isaiah (1QIsa) dated to 125 BC, 1000 years earlier than the Aleppo Codex. This scroll, itself a many-generational copy, proved to be identical to the *Masoretic* Text of Isaiah in more than 95 percent of the text. The 5 percent variation consisted primarily of obvious slips of the pen and spelling alterations. In fact, this proved to be the case for all of the other biblical scrolls among the Dead Sea Scrolls."

³⁶⁵ The editors of this Bible comment, "Accuracy has been ensured via side documentation- part of what is called *masorah*. This gives rise to a "*masoretic text*"—a Bible that accords with the *masorah*... *Masorah* refers to everything transmitted with the biblical text except its consonants." They list the history of transmission as follows: Aaron ben Moses-Asher (Tiberias, c. 930 C.E.) compiled books of the Bible into one manuscript (called the Aleppo Codex per Price 2007 page 58). Then Samuel ben Jacob (Egypt, 1010 C.E) composed a codex from several manuscripts including Ben-Asher's. In 1840 C.E. this codex became available to the public and scholars, and was named the Leningrad Codex. It was then edited "for modern use" by Rudolph Kittel and Paul Kahle in an edition named the *Biblia Hebraica Kittel* (1937). After World War 2 another edition named the *Hebraica Stuttgartensia* (1967-77) was produced. It has since been electronically compiled. The JPS has relied on these documents. *JPS Hebrew-English TANAKH*, trans. JPS scholars (Philadelphia, PA: Jewish Publication Society, 1999), ix-xi.

out of the east, and shineth even unto the west; so shall also the coming of the Son of man be.” That this event appears to be a widespread event is supported by the descriptors, “the sun shall be darkened, and the moon shall not give her light, and the stars shall fall from heaven, and the powers of the heavens shall be shaken,” then “all the tribes of the earth mourn,” and they (the angels) “shall gather together his elect from the four winds, from one end of heaven to the other.” This is considered a real tangible event, of a worldwide scope. While the people are comparable in both instances, there are massive astronomical and geological changes as well.

- 2) Luke 3:34-38 In these passages Noah is listed in the lineage from Adam to Abraham, of which both of those are considered real personages in the scriptures.
- 3) Luke 17:24-30 These passages mirror those recorded in Matthew chapter 24.
- 4) Hebrews 11:7 Here Noah has been listed in the record of those with faith, and who were saved (preserved) by that faith. He is listed before Abraham who “by faith” left his homeland to an inheritance promised by God to him. This is considered a literal event by many scholars, and certainly within the context of the Bible itself.
- 5) Peter, the Apostle, referred to Noah in 1 Peter 3:18-21. He mentions that only eight souls were saved through the flood- implying that it was a literal event. This is juxtaposed with Christ dying for the sins of men, and the symbolism of baptism by water cleansing away sin. Both of these events are considered universal in extent—that is Christ died for all men, and baptism for the washing away of sins is available to all men, i.e. to those who call upon the name of the Lord.
- 6) 2 Peter 2:5 Noah and his family, eight people, are again listed as those who survived while “bringing in the flood upon the world of the ungodly.” This is preceded by God’s judgment on the angels who rebelled, and the judgment of Sodom and Gomorrah follows after. While the judgment on Sodom and Gomorrah is local in extent, it is comprehensive except for Lot and his family. The judgment against the angels appears to be extensive and comprehensive. Thus within the context of this passage, God does judge and destroy sin (sinners). Yet

as it says in verse 9; “the Lord knoweth how to deliver the godly out of temptations, and to reserve the unjust unto the day of judgment to be punished.”

Within the Old Testament Noah is mentioned within the Pentateuch (written by Moses), the historical book of 1 Chronicles 1:4, and the prophetic writings of Ezekiel:

- 1) Genesis 6-9 qualifies Noah as having a family with sons and their wives and his own wife. He built a boat and put provisions on it. He talked with God. He sinned by getting drunk, but is known as a man who walked with God.
- 2) In 1 Chronicles 1:4 he and his sons Shem, Ham, and Japheth are listed in the genealogy from Adam to Abram- similar to Luke chapter 3 of the New Testament.
- 3) Ezekiel 14:14 recorded a quote from the Lord (Y^ehovah), “Though these three men, Noah, Daniel, and Job, were in it (the land of Israel), they should deliver their own souls by their righteousness, saith the Lord God” (Adonay Y^ehovih). These are all considered real Bible characters, who were delivered from God wrath.

Thus, within the Bible Old and New Testament there is a uniformity of perspective regarding the personhood of Noah, and the events of his life including the Flood (its extent- the destruction of all flesh outside the ark, and its purpose), and of his relationship with God. This testimony has been faithfully transcribed through at least the last 2000 years, and is consistent with older documents found throughout the ancient Levant that are much older (to the 3rd millennium B.C. as has been discussed in this present writing).

B. Certain scholars have developed literary structures that argue for a fragmentary composite structure of Genesis and of the Noah Flood Account. These literary structures are best comprised of what has become known as the Documentary hypothesis (with the subsets Fragmentary and Supplementary hypotheses). These are inclusive of the various approaches of the J/P/R/D writings best

exemplified/summarized by Wellhausen.³⁶⁶ His writings have been modified and even rejected to some degree by more recent writers but the basic assumptions remain that underlay the approach of these groups to the analysis of the literary structure of Genesis.^{367, 368, 369} Archer in his A Survey of the Old Testament and others have concisely summarized the historical aspects of this topic.^{370, 371}

1. The Documentary Hypothesis

There are linguistic views of the construction of the Noah Flood Account that if correct would cast significant doubt on the connectedness component of it, and thus the reliability of it as a TNR. It has been said by some scholars that Genesis and other books of the Pentateuch are composites of documents that have been spliced together possibly several times over large periods of time. Most of these commentators have felt that the documents may have remnants of ancient oral histories entwined in them but that the documents that are now available are of a much more recent composition (and not compiled by Moses). Many scholars have written on this, with a large variety of views, but they are collected under the umbrella of what has been called the Documentary Hypothesis. There are subsets of this called the Fragmentary and Supplementary Hypothesis.

The basic tenants are:

³⁶⁶ J. Wellhausen, *Prolegomena to the History of Israel* (1878, republic EBooks 2003), EBook at Project Gutenberg #4732.

³⁶⁷ H. Gunkel, *The Legends of Genesis* (New York, NY: Schocken Books, 1964).

³⁶⁸ E.A Speiser, *Genesis* (Garden City, NY: Doubleday and Company Inc, 1964).

³⁶⁹ G. Von Rad, *Genesis* (Philadelphia, PA: The Westminster Press, 1972).

³⁷⁰ G.L Archer, *A Survey of Old Testament Introduction* (Chicago, IL: Moody Press, 1985).

³⁷¹ NIDOTTE Geneology in the OT: Theology 5a.

- 1) The flood account was a composite of at least two authors for the following reasons.^{372,373}
 - a) The name of God in some portions of the account is Yahweh (called J sections) and in others Elohim (called P or priestly sections).
 - b) The uses of the names of God correspond with certain characteristics of God, and His interaction with man, and thus linguistic construction of some sections are associated with the source document that it came from.
 - c) There are duplications of parts of the story within it, and some parts even contradict each other.
 - d) It could not have been compiled by Moses, as reported because it was written in the third person and even mentions Moses' death (Deuteronomy).
 - e) As such it is considered to be a poetic piece of literature that deals with moral issues and various parts of it were written between 950 to 450 B.C. and the whole Pentateuch compiled by 200 B.C.³⁷⁴ It is considered not to be an accurate account of a true event- but had some kernels of truth, handed down from ancient times and formulated into a legend.³⁷⁵

³⁷² J. P. Tanner, *Source Analysis of the Old Testament in Old Testament 1* (published by the author, 6/1/00), 12.1-12.8, www.paultanner.org (accessed June/19/2010). This author also opposed the Documentarians, and addressed their "form criticism."

³⁷³ W.H Green, *The Unity of the Book of Genesis* (Grand Rapids, MI: Baker House, 1875, reprint 1979), 65. Green, an adamant opponent of the Documentarians, was able to list the reasons they believed in the multiple authors.

³⁷⁴ Tanner, *Source Analysis*, 12.1-12.3.

³⁷⁵ Gunkel, *Genesis*, 3-4. He stated, "One of the chief points of difference is that legend is originally oral tradition, while history is usually found in written form... the writing down of an historical tradition serves to fix it, whereas oral tradition cannot remain uncorrupted for any length of time and is therefore inadequate to be the vehicle of history. Now it is evident that Genesis contains the final sublimation into writing of a body of oral traditions."

A brief history follows:³⁷⁶

In 1670 Benedict Spinoza wrote that the Pentateuch could not have been written by Moses because it was written in the third person and mentioned his death in Deuteronomy 34. He suggested that Ezra was the compiler of it.

Jean Astruc in 1753 wrote on the differences of God's name Elohim in Genesis 1 and Jahweh in Genesis 2; suggested that two different authors wrote separate histories that Moses then united together.

Johann Gottfried Eichhorn, 1780, extended this concept to include all of Genesis and the first two chapters of Exodus into the separate categories based on the uses of the name of God. This became the J-E unit. Later he and others would write that Moses did not do the compiling, but someone later.

In 1805-6 Wilhelm DeWitt would comment that the book of Deuteronomy was written during the time of King Josiah as a political work during the King's attempt at reformation of the nation of Judah (2 Kings 22). He claimed that none of the Pentateuch was written before the time of King David (and thus after the time of Moses). The sources then comprised J/E/D.

Sub-groups comprised of the Fragmentists and Supplimentarians developed during this time. Alexander Geddes, a Fragmentist, in 1792 argued that Genesis was compiled of fragments of documents both before and at the time of Moses. Heinrich Ewald in 1823 propounded that there was one underlying document-E to which other minor ones had been added. Per Archer this did not have much impact on the debate.³⁷⁷

³⁷⁶ Archer, *Old Testament Survey*, 21.

³⁷⁷ *Ibid*, 85.

Afterwards, Hermann Hupfield in 1853 had a significant impact with his claim that the Elohist sections were actually comprised of two parts E1 and E2. E2 was thought to contain portions “which greatly resembled J in style, vocabulary, and type of subject matter, and which occasionally seemed to contain allusions to material also found in (the presumably later)J.”³⁷⁸ His E1 became the later P or Priestly portion of Genesis. The composition was now P/E/J/D.

Julius Wellhausen, in 1878, produced his *Prolegomena* in which he propounded a view of the development of the history and nationhood of Israel as reflected in sacred literature. He believed that the Pentateuch was progressively written, often with political expedients in mind. His views became widely accepted. Some current commentaries still recite his views.^{379,380,381}

Hermann Gunkel, in 1901, wrote in support of the documentary hypothesis but with a new twist. Albright, in his introduction to Gunkel’s book *The Legends of Genesis*, explained “The approach of Wellhausen to Israelite literature was essentially isolationist: he refused to recognize the antiquity of oral tradition and insisted that the stories of Genesis were, in general, reflections of life and religion in the period of the Monarchy, erroneously projected backward into pre-Mosaic times.”³⁸² He went on to say, “Against Wellhausen, Gunkel saw that the narratives of Genesis were a prose form of earlier poetic traditions, often going back to a high antiquity.” Albright then commented, in some agreement with

³⁷⁸ Ibid, 87.

³⁷⁹ R.C. Fuller, L. Johnston, and C. Kearns, *A New Catholic Commentary on the Holy Scriptures* (London: Thomas Nelson, 1975), 185-186.

³⁸⁰ R. Alter, *The Five Books of Moses* (NY,NY: W.W. Norton, 2004), x-xvi; 34-35.

³⁸¹ Brettler, *How to Read the Jewish Bible*, 35-36.

³⁸² W. Albright, introduction to *Genesis*, by H. Gunkel (NY,NY: Schocken Books, 1964), vii.

other documentarians, that the prose was not written till the 10th century, but was orally transmitted as “saga”, with “extraordinary fidelity” to that time.³⁸³

Recent supporters have included the prominent theologians G. Von Rad and E.A. Speiser. Von Rad wrote in 1972, “In Genesis the narrative material extends over thirty-eight chapters. How can we analyze such extremely complex material? There is now no fundamental dispute that it is to be assigned to the three source documents J, E, and P, and there is even agreement over detail. But it is equally certain that the narratives incorporated into the source documents already have a long history behind them. So where do they come from, and what is the nature of the information that they give about Abraham, Isaac, and Jacob?... So while we may not doubt that as ‘recipients of revelation’ and ‘founders of cults’ (A. Alt), Abraham, Isaac and Jacob were historical personalities, it is no longer possible to use the narrative material for biographical accounts. It has passed through too many hands. The narratives offer little more than a few indications of the characteristic cultural situations that governed the living conditions of these clans. Nor do they offer any point of reference for even an approximate dating of the patriarchs.”³⁸⁴ Speiser commented, “The received biblical account of the Flood is beyond reasonable doubt a composite narrative reflecting more than one separate source. One of the sources goes back to P... (many) accept J as the only other author involved.”³⁸⁵

See the following **Table 1** for a current breakdown of the text in Genesis 6-8 into **Y** and **P(E)** without noting the redactor using the writings of Kikawada (who does not support the Documentary Hypothesis, but is a Hebrew scholar and understands the views of that group), and Von Rad (a supporter of the Documentary Hypothesis). In the Discussion section a second table is presented

³⁸³ Ibid, viii.

³⁸⁴ Von Rad, *Genesis*, 21.

³⁸⁵ Speiser, *Genesis*, 54.

with Dr. Green's criticism of the Documentary Hypothesis. His breakdown of the text is given there.

C. Summary of the Connectedness of the Bible

There are at least nine literary devices that argue for a unified and thus a single composition of the Noah flood account. In conflict with this are the analyses of the Documentarians who consider it a composite one. The implications of these various literary structures will be assessed in the Discussion Section.

**See Volume 2 Figures and Tables
Connectedness**

GENERALIZABILITY**INTRODUCTION**

The third component of a TNR is Generalizability: “Unlike any other kind of narrative only TNRs are capable of supporting and sustaining generalizations... there ought to be empirical correspondence between a TNR and the material facts it purports to represent.” (Briggs) ³⁸⁶

Flooding is a common local and regional event that occurs in various parts of the world, even currently. If the Noah flood was only local or even regional it would most likely be almost impossible to detect, or differentiate from the many ancient episodes. Woolley’s recognition of a flood layer at Sumer was considered by some as documentation of the Noah flood,^{387,388} but there was evidence of civilization under the flood layer as well. Many have discounted it for this reason.³⁸⁹ Some consider that there is evidence that the Black Sea basin was rapidly flooded, and the local villages around it were destroyed. Those who survived became the promoters of the flood story according to some researchers.³⁹⁰ There are stories of the Nile flooding,³⁹¹ and of river flooding in

³⁸⁶ P. Briggs, *Testing the Factuality of the Conquest of Ai Narrative in the Book of Joshua* Institute of Archeology and Biblical History Academic Monograph Series AMS/TSU AR.2 (Albuquerque, NM: Trinity Southwest University, 2001), 15.

³⁸⁷ C.L. Woolley, *The Sumerians* (New York: The Norton Library, reprint 1965), 29-32 and 48.

³⁸⁸ I. Wilson, *Before the Flood The Biblical Flood as a Real Event and how It Change the Course of Civilization* (New York: St. Martin's Press, 2001), 28-33.

³⁸⁹ Hoerth discussed the fact that the flood layer found by Woolsey actually contained evidence of civilization underneath and within the 8 foot layer; that it is contested that it may have actually been a windblown layer; and that other sites around Ur do not have the layer. Thus it was only a very local event. He stated, “Evidence of the biblical flood has not been found in the silt layers of Mesopotamia.” A.J. Hoerth, *Archeology and the Old Testament* (Grand Rapids, MI: Baker Books, 1998), 189-191.

³⁹⁰ W. Ryan and W. Pittman, *Noah's Flood The New Scientific Discovers About the Event that Changed History* (New York: Simon and Schuster, 1998).

China.³⁹² Both may have components of a broader flood, and it appears that some Chinese stories associated it with the change of position of the visible stars.³⁹³ Each of these could be claimed, because of their ancientness, to be the original. It would be difficult to determine, and it is hotly debated among those who believe in a local occurrence for the basis of the flood.³⁹⁴

Yet the Noah flood account describes the destruction of **all** flesh (that is outside the Ark

³⁹¹ It is a convoluted story but follows: “The gods assembled as Ra desired, and made obeisance before him... He addressed the gods, saying: ‘ O Nu, thou the eldest god, from whom I had my being, and ye ancestral gods, hear and know now, that rebellious words are spoken against me by mankind, whom I did create... For Lo! I desire in my heart to destroy utterly that which I did create. All the world will become a waste of water through a great flood as it was at the beginning, and I alone shall be left remaining... Hathor went upstream slaughtering mankind... for many nights she waded in blood... then Ra repented. His fierce anger passed away, and he sought to save the remnant of mankind. He sent messengers... unto Elephantine so that they might obtain speedily many plants of virtue... (the ground up plants were) steeped with barley in vessels filled with the blood of mankind. So was beer made... Then the god (Ra) gave command that the jars should be carried to the place where the vengeful goddess rested for the night after the day of slaughter. The jars were emptied out as was his desire, and the land was covered with the flood. When Hathor awoke her heart was made glad. She stooped down and she saw her beauteous face mirrored in the flood. Then began she to drink eagerly, and she was made drunken so that she went to and fro over the land, nor took any heed of mankind. So it came that from that day, when the Nile rose in red flood, covering the land of Egypt, offerings of beer were made unto Hathor. Men and women partook of the draughts of sweetness at the festival and were made drunken like the goddess.” D. MacKenzie, *Egyptian Myth and Legend* (London: Gresham Publishing Co, 1907), Chapter One, <http://www.mythology/Egypt/13/13.html>.

³⁹² There are two main Chinese flood stories, one seems to be local while the other could represent a broader catastrophe. In the story of “Yu the Great” Yu was successful in controlling the flooding that occurred in China. He did this by building new river channels, whereas his father had built dikes which had failed—for which he was executed. He has been mythologized by some as having divine attributes. Yu the Great in Wikipedia Online: en.wikipedia.org/wiki/Yu_the_Great. In the second story the goddess Nuwa created mankind, and stopped a flood from destroying mankind. In this second story two other deities got in a fight and caused calamity everywhere in heaven and earth. In the process a mountain collapsed and caused a pillar that held part of heaven up from the earth to break and this caused part of the sky to fall. Water poured out of the heaven and up from the earth. Nuwa collected colored stones, melted them and plugged the hole in the sky. She subsequently killed a turtle and used his four legs to make new pillars for the heavens. Afterwards it was noted that the earth was tilted to the southeast and the heavens to the northwest. From: The Sahaja Yoga Chinese Newsletter. Online: angelfire.com/zine/sychinese/nuwa.html. D. Porter considered that the flood story was a way to explain the shift in the movements of the heavenly bodies seen by the ancient Chinese people of the time.

³⁹³ D. Porter, *From Deluge to Discourse* (Albany: State University of New York Press, 1996), Chapter 2.

³⁹⁴ There are those like Ryan and Pittman that argue for a Black Sea origin for the flood, and others such as Assyriologists, Woolley and others, that argue that it came from southern Mesopotamia.

of those that had the “breathe of life”), the covering of **all**³⁹⁵ the mountains (or hills)³⁹⁶, of **rain lasting 40 days continually**, and of a **bursting forth of subterranean waters** (Gen. 7:11, 12). This would have been unlikely to be a local event by its description. If this event was global, it would have been a unique event for no global flooding has since been recorded or observed in recorded history. As such, what unique residual evidence would be expected?

1) Taking the evidence of local flooding as a limited yardstick, layered strata of earth consistent with water deposition should be found which covered the earth. The extent of this flooding should be global as the record describes the covering of *all* mountains (in contrast to the impact of local or regional flooding where *all* would not be expected to be used).³⁹⁷ There should be evidence that these strata were laid down rapidly and sequentially, broadly covering the bulk of the continental earth including the areas of current mountains. These mountain areas may not relate at all to pre-flood hills. Chronologic dating methods of the earth should be consistent with a continuous depositional stratigraphic composition of the earth.

2) These strata should contain lots of buried animals and plants. The Noah account describes the death of all life with the “breathe of life”—if they remained outside the ark during the flood. This would imply that many should have been buried in the muddy strata. Of the animals and plants that were buried there should be evidence of some of their remains still detectable, and discoverable mechanisms by which they were preserved. Evidence of catastrophic death would be expected.

3) The histories of cultures from around the world should contain ancient and related stories of this event.

4) The DNA studies of man and animals should show that the various groups came from separate small stocks (as each would have had to come from the ark stock). These are reasonable evidences to look for regarding the Noah flood story:

³⁹⁵ All (Strong’s 3605) can mean “the whole, all, every.”

³⁹⁶ See section on Determinancy for a discussion on hills and mountains.

³⁹⁷ See Discussion on tsunamis, floods, and volcanic eruptions.

I will briefly review the various relevant scientific and sociologic fields for these sorts of evidences. They will be outlined as follows:

A. The study of natural disasters: The science of flooding and volcanology will be discussed.

1. Tsunamis, flooding by other mechanisms and catastrophes related to volcanic activity will be discussed. What are the properties of eye witness accounts in each of these conditions? What is the measurable physical impact? How can these local events be used to consider evidence for a worldwide flooding event?

B. Geology: Is there evidence consistent with massive worldwide flooding?

1. Are there widespread marine strata throughout the geologic column on the continents that supports the concept of massive flooding?
2. Are there widespread unique deposits of effluvial origin, from turbidity currents, some worldwide erosion surfaces, and some worldwide unconformities that would be consistent with massive continental flooding?
3. Can plate tectonics be modeled to simulate a worldwide flood?
4. Is there evidence of catastrophic deposition of plant and animal remains? What are “death assemblages”?
5. Are there types of rapid chemical processes of fossilization?
6. Can radiometric dating be supportive of a short age of the earth as might be expected if much of the present surfaces of continents were laid down under a massive flood?
7. Would volcanic activity be expected to be part of a massive flooding event, and what evidence for this might be left behind?

C. Biology: Is there evidence consistent with unique fauna taken aboard the Ark and its post flood dispersal?

1. Do gene mutation rates and load argue for a short history of animal kinds?
2. Is there evidence from mitochondrial DNA analysis for the recent development and expansion, from a small population, of man or other animals?

3. Does classification of life forms that have the “breathe of life” in them allow for them to be separated into distinct groups or “kinds” as discussed in the Genesis account?

4. Are there reasonable feasibility studies regarding the preservation of animal groups on the ark and their subsequent dispersal post flood including speciation/reproduction, and feed/refuse requirements?

D. Anthropology: Is there commonality of mankind consistent with dispersal from Noah and his family?

1. Are there flood stories from around the world with unique common characteristics?

2. Is there the appearance of growth and progressive migration of populations from a common source?

3. Are there indications of early language, technologies, artistry that connect widely separated cultures?

Each of the categories: A, B, C, and D will be discussed below.

A. The study of natural disasters

1. Flooding: At this present time there are two common types of flooding—the overflowing of stream or river channels when the volume of water exceeds the capacity of the channel to conduct the water; and the higher than normal rise of water along lake or coastal areas.³⁹⁸ One author, from Canada, lists these as being due to snowmelts, rainfall, ice jams, catastrophic outbursts, and coastal storms. Another cause being propounded recently is that of massive landslides, thought often to be associated with volcanic activity, that fall into a large body of water like

³⁹⁸ *Environment Canada*, "The Management Of Water," http://www.ex.gc.ca/en/mamage/floodgen/e_intro.htm.p. 1.

an ocean and which results in a massive tidal wave (or “mega-tsunamis”) projecting to the opposing shore.³⁹⁹

In a circular put out by the USGA entitled *The World’s Largest Floods, Past and Present: Their Causes and Magnitudes*, the authors list the estimated “characteristics of 27 freshwater floods that had flows greater than 100,000m^{3/s} (cubic meters per second) during the Quaternary time.” The greatest calculated flows, in this article, are those estimated to have been due to the melting and failure of ice-dams at the end of the glacial ice age period. Historically recorded events are associated with earthquake generated landslide dams, some rain created landslide dams and their subsequent failure. Some large ice dam failures still occur on some northern river systems like the Lena River in Russia, but the larger rainfall created flooding tends to be south of the 40⁰ latitude. Overall, the calculated local and even regional flooding of today is ten to one hundred fold less than what is calculated by some geologists to have been for the end of the ice age. They did not give any evidence for a global flood, and only remarked in passing on the proposition that the Black Sea area had been flooded at the end of the ice age by a breach in it from the Mediterranean Sea. They did not discuss tsunami or hurricane related flooding, yet catastrophic flooding along coastal areas has often been the result of these forces of nature.⁴⁰⁰

a.) Hurricane Katrina:

This hurricane, which was a regional event, is well documented for its properties and impact on the southern coast of the US in Louisiana on August 29th 2005. It had sustained winds of 175 mph at its peak, and on landfall up to 125 mph. Levees that were made to stop waves up to 27 feet high were subsequently breached, and 80 % of New Orleans was flooded. Other coastal areas were estimated to have surges up

³⁹⁹ "Giant Wave Could Threaten US," *BBC News*, October 4th 2000, <http://wwwnews.bbc.co.uk/q/hi/sci/tech/956280.stm>.

⁴⁰⁰ *The World's Largest Floods, Past and Present: Their Causes and Magnitudes* (USGA Circular #1254, 12/19/005).

to 14 feet high (Plaquemines Parish). "Federal disaster declarations covered 90,000 square miles (233,000 km³) of the United States, an area almost as large as the United Kingdom." One estimate given was the loss of 1,836 people.⁴⁰¹

b.) December 26th 2004 Indian Ocean Tsunami:

This tsunami was a large regional event, had wave surges up to 65-100 feet high, and 60 mile fronts along the island of Sumatra. It was triggered by an earthquake within the Indian Ocean 60 miles from Aceh, Sumatra. It has been reported that up to one third of Aceh's capital Banda Aceh perished in the episode- approximately 100,000 people. One hundred and sixty thousand were thought to have died or were missing in Indonesia.⁴⁰² Its impact was felt in eleven countries, included Southern Africa 5000 miles away. All together, about 160,000 to 225,000 people died.^{403, 404} While having such impact on the direct coastal areas, it did not generally travel more than a thousand feet inland, and did not cover most small hills along the coasts.

c.) Johnstown Flood:

Several historical local river flooding events have been extensively recorded. One of the most well known in the United States is the Johnstown Flood. This flood occurred on May 31st 1889. A dam broke upstream of the town of Johnstown Pennsylvania. It is estimated that 20 million gallons of water were suddenly released. A wave traveling 40 mph, 60 feet tall, and a half mile wide hit the town resulting in the deaths of 2,200 people in the town of 30,000.^{405,406,407} It was one of

⁴⁰¹ *Wikipedia*, "Hurricane Katrina.", http://www.en.wikipedia.org/wiki/Hurricane_Katrina.

⁴⁰² "The 26 December 2004 Indian Ocean Tsunami: Initial Findings from Sumatra," *USGA*, 2004, http://www.walrus.wr.usgs.gov/tsunami/srilanka05/Yala_12.html.

⁴⁰³ "The Deadliest Tsunami in History?" *National Geographic*, January 7 2005, <http://www.news.nationalgeographic.com/news/pf/65467352.html>.

⁴⁰⁴ "2004 Indian Ocean Earthquake," *Wikipedia*, 2004, http://www.en.wikipedia.org/wiki/2004_Indian_Ocean_earthquake.

⁴⁰⁵ W.S. Frank, "The Cause of the Johnstown Flood" <http://www.smoter.com/flooddam/johstow.htm>, July 17 2008.

the worst natural catastrophes of American history. But it only impacted, physically, the valley floor in that area.

There have been several other historical local and regional floods with similar characteristics: 1) There were many survivors that were able to observe the catastrophe, from a relatively safe vantage point; 2) Not all buildings, small hills, or even trees were covered or knocked down (this varied given the conditions); 3) Some flooding involved high velocity and some lower velocity water movement. This resulted in specific indicators of damage and will be discussed below.

The impact of flooding is affected by several factors. These include depth of the flood waters, the velocity of the water (at any given point), and the likelihood of debris.⁴⁰⁸ Flood hazard classifications have been set up using this data.⁴⁰⁹ It is important to note that with even just 1.5 feet of water moving at 2 mph a person may become unstable walking in flood waters. The velocity of the water and its height is affected by the width of the channel it is flowing in, and the amount of water needing to be conducted per time period. Higher velocities and levels are obtained in more narrow channels and the levels and velocities will decrease once a broader channel or plain is reached.⁴¹⁰ For example: in 1982 a collapse of an earthen dam in the Rocky Mountain National Park USA lead to a wall of water 25-

⁴⁰⁶ "Johnstown Flood," *Wikipedia*, July 17 2008, http://www.en.wikipedia.org/wiki/Johnstown_Flood.

⁴⁰⁷ The Authors noted, "Since the early 1800's the Johnstown area has experienced at least 47 floods." Major ones occurred in 1889, 1936, and 1977. U. Kaktins and H. C. Fry, "The Floods of Johnstown," in *54th Annual Field Conference of Pennsylvania Geologists held in Johnstown, PA, October 5-7, 1989*, ed. J.A Harper (Harrisburg, PA: Department of Environmental Resources Bureau of Topographic and Geologic Survey, 1989)139-149.

⁴⁰⁸ *Flooding: Defra-Department for Environment Food and Rural Affairs* (Flood Risks to People Phase 2 Project Record, 3/2006), 20, FD2321PR.

⁴⁰⁹ *River Flood Hazard Assessment* (Flood River: Environment Waikato. New Zealand, April, 2008), Doc. #11299499.

⁴¹⁰ *Wetlands: Protecting Life and Property from Flooding*. (May 2008) FEMA.EPA843-F-06-001.

30 feet high racing at 9 mph down the Roaring River canyon. It slowed and decreased in height to 10 feet when it flowed into a valley. Three people died.⁴¹¹ There are many other factors to include when calculating the flood hazard classification, but are not necessary to this discussion.

The effects of high velocity and high water level have been documented by photography in the above catastrophes. Tree damage often retains a record of the event. This is seen in the photos from the Johnstown Flood. There is one of a large tree uprooted and harpooned through the second story of a collapsing house (**Figure 1**). In this and other photos of the event bark is commonly stripped off, and the root bulbs have short root remains. This is a result of high velocity high volume flooding. In reviewing photographs of the impact of the tsunami in 2004, it appears that few trees were knocked down although some were bent over (**Figure 2a**). Most had leaves and branches. The sediment layer post flood was, in some areas, about 18 inches (**Figure 2b**). These results demonstrated lower velocity and lower height flooding (in general). Trees in the Katrina Hurricane show great variety of injury from being completely uprooted, stripped of bark, and thrown into other trees; to trees slightly bent over still maintaining their bark, roots, and even leaves (**Figure 2c**). These results were consistent with the highly variable local impact of the hurricane. One study looking at the impact of flooding and ice packs on tree structure was done by Sigafos in 1964.⁴¹² Although an older paper, he did show the effects of water and ice damage on trees in the flood plain of the Potomac River near Washington D.C. Most of the trees he reported on suffered limb and trunk damage, were bent partially horizontally, but from his report many did not lose their root system. However, this depended on their location to the bank of water and the frequency of flood waters reaching the tree. At flood stage the depth could get greater than 10 feet for several days. He comments that “ The majority of flood-

⁴¹¹ *Town Of Estes Park Colorado*, "The Lawn Lake Flood," www.estesnet.com.

⁴¹² R.S. Sigafos, *Botanical Evidence of Floods and Flood-Plain Deposition USGA paper 485-A* (Washington D.C.: Government Printing Office, 1964).

plain trees, as a result of this experience (previous flooding), show varying degrees of damage; so that most are small and have poor form or are, in forestry terms, of low quality. The trees were bent and twisted and consist of several sprouts growing from different sizes and forms of stumps (**Figure 3**). Trunks of trees along the banks of a channel and on upstream ends of islands commonly exhibited scars that had resulted from repeated abrasion by debris and ice carried by high water. The only concentrations of large and straight, single-stemmed trees grew on the higher ridges of the flood plain and at considerable distances from the river channel.”⁴¹³

One way that the USGA measures the depth of tsunami or hurricane produced tides is the scarring on the bases of tree.⁴¹⁴ As well, tree condition post catastrophe can be used to estimate the velocity, height, and the amount of debris that occurred in the event—as mentioned above. Trees in the flooding situations of the Johnstown Flood, the Indonesian Tsunami, and the Katrina Hurricane showed abrasion at the bases to varying heights and degrees (**Figure 4a and b**; and see section on Mount St. Helens).

2. Volcanic catastrophes:

a.) **Mount St. Helens:** On May 18th 1980 this volcano re-erupted and for a period of 6 years and afterwards continued to do so intermittently. The processes and impacts of its eruption were and are continuing to be studied. Up to 600 feet of water and air fall earth deposits occurred in the initial eruption. Significant ash deposits spread over 5 states. It is estimated that the explosive force was equivalent to 20 million tons of TNT. The estimation volume of the debris of ice

⁴¹³ Ibid R.S. Sigafos, (1964), A7.

⁴¹⁴ USGA, *Indian Ocean Tsunami: Initial Findings on Tsunami Sand Deposits, Damage, and Inundation in Sri Lanka*, <http://www.walrus.wr.usgs.gov/tsunami/srilanka05/Mankerni5556.html>.

and rock were 3.3 billion cubic yards, “launched northward off the summit,”... at 150 miles per hour.⁴¹⁵

As a result of the high velocity steam and debris cloud the whole mountainside of forest to the north of the volcanic blast was flattened (**Figure 5a**). Most of the trees of this area were stripped of bark and branches, and the root bulbs stripped of their roots (**Figure 5b-d**). Dr. Steve Austin has shown at Spirit Lake, after the Mount St. Helens volcanic explosion, that some of these trees, torn out of their base, were re-positied in an upright position in the remnant lake. As these trees became water soaked they sank and peat formation began to occur (**Figure 5e**). As well, small canyons with layered strata and what appeared to be meandering streams were eroded out of the pyroclastic ash and rock deposits during the initial and subsequent blasts (**Figure 5f**). Tree trunks covered by earlier blast deposition became re-exposed by subsequent erosion (**Figure 5g**). He discovered evidence for pyroclastic flow erosion through solid basaltic rock that had occurred during these eruptions.⁴¹⁶ There was water damage downstream on the Toutle River, and the markings of the level of the flooding could be seen at 10 feet or more in some areas. Trees in the flooding areas did not appear to be knocked down like those in the blast zone, but did show abrasion marks on the trunks to the height of the water flow (**Figure 5h**). The loss of life was very limited due to the isolated area where the pyroclastic flow occurred and due to the US government requiring people to leave the area.

Because the Mount St. Helens volcanic eruption was so well studied, the nature and characteristics of these eruptions is better understood. It was shown that large amounts of stratified sediment can be laid down rapidly. These were shown to be rapidly eroded into small canyons, with the residual water flow having the

⁴¹⁵ J. Morris and S.A. Austin, *Footprints in the Ash The Explosive Story of Mount St. Helens* (Green Forest, AR: Master Books, 2003).

⁴¹⁶ S.A. Austin, *Mount St. Helens Explosive Evidence for Catastrophe* (EiCajon, CA: Institute for Creation Research, 1990's), slide presentation, CD.

appearance of a meandering stream. The effects occurred within hours to days. Large trees, in the blast zone, were knocked down, the bark striped off the trunks, roots torn from the bulbs and limbs from the trunk, and this debris matted together and eventually sank or deposited in the upright or horizontal position before it decayed.^{338,339}

b.) Martinique and Mount Pelee: On May 8th 1902 the populous and prosperous town of St. Pierre on the island of Martinique was destroyed by the volcanic eruption of Mt. Pelee. Approximately 28,000 people perished and there were only 2 known survivors from within the town. Several important facts surround this event- as it was well recorded: The timing of the event began with fumarole activity which increased in January 1902. Increasing explosions occurred in April, and the Crater Lake gave way on May 5th which filled the Blanch River with hot water and pyroclastic debris. The volcano then did its complete damage on May 8th.⁴¹⁷

When the town was destroyed, it was hit by superheated gas, ash, and rock that traveled at an estimated 100 miles per hour. It knocked down some buildings and moved a statue weighing three tons 16 feet from its base. It flowed into the water of the port and destroyed 20 ships. People who died fell in their tracks seared from the heated ash and gas. The two people who survived the event and that had been within the town at the time of the explosion were a prisoner in the jail's dungeon with its thick walls and small windows- he was severely burned; and a shoemaker who lived at the edge of town—who too was burned. There were those outside of the blast on land and sea who saw the event but did not die. Thus there were eye witness accounts of those in the town before the last explosion who recorded the events up to it, those who lived through it within and outside it, and those who came later and saw the devastation.

⁴¹⁷ "How Volcanoes Work, Mt. Pelee Eruption 1902", http://www.geology.sdsu.edu/how_volcanoes_work/Pelee.html.

Photographs reveal that even with 100 mph blasts of ash and hot gas there were still some parts of buildings left standing and trees on the nearby hills left upright though burned and broken (**Figure 6a-c**). Bodies of animals and people lay in the streets near where they were hit by the gas and ash—charred but recognizable as to what they had been. It does not appear that the town was hit by a lava flow but only by the pyroclastic gas flow.⁴¹⁸

Interestingly, the town was invaded by animals and insects in the months preceding the May blast. It has been estimated that 50 people and 200 animals died by snake bites.²²

Reports from this event reveal several important facts: The town did have a committee evaluate the volcano and the report considered it safe,⁴¹⁹ and the

⁴¹⁸ S.A. McAlister and L.A. Ayme, *Martinique Flood of Fire and Burning Rain. The Greatest Horror of Modern Times* (Philadelphia and Chicago: P. W. Ziegler and Co, 1902).

⁴¹⁹ Ibid S.A. McAlister (1902), the wife of the US consul wrote a letter to her sister a few days before May 8th stating:” This morning the whole population of the city is on the alert and every eye is directed toward Mont Pelee, an extinct volcano... Fifty years ago Mont Pelee burst forth with terrific force and destroyed everything within a radius of several miles. For several days the mountain has been bursting forth in flame and immense quantities of lava are flowing down its sides... We can see Mont Pelee from the rear windows of our house, and although it is fully four miles away, we can hear the roar of the fire and lava issuing from it. The city is covered with ashes and clouds of smoke have been over our heads for the last five days. The smell of sulphur is so strong that horses on the streets stop and snort... and die from suffocation. My husband assures me that there is no immediate danger,” pg. 52-54. One person who saw the destruction from a distance in a boat and survived said;” I saw St. Pierre destroyed. It was blotted out by one great flash of fire... The spectacle was magnificent. As we approached St. Pierre we could distinguish the rolling and leaping of the red flames that belched from the mountain in huge volumes and gushed high into the sky. Enormous clouds of black smoke hung over the volcano.... There was a constant muffled roar... There was a tremendous explosion about 7.45 o’clock, soon after we got in. The mountain was blown to pieces. There was no warning. The side of the volcano was ripped out, and there was hurled straight toward us a solid wall of flame. It sounded like thousands of cannon... The fire rolled in mass straight down upon St. Pierre and the shipping. The town vanished before our eyes... Wherever the mass of fire struck the sea the water boiled and sent up vast clouds of steam.” Pg. 55-56. Rescue parties reported that in some cases bodies were burnt to a crisp yet shoes on the dead remained unburnt, or as in other cases one body was severely burned and another next to it not. The deposition of ash and cinders was unlevel as well- some parts of the town had almost none and others up to 8 feet. Many buildings were knocked down but the city hall front with its clock was left standing as well as portions of the cathedral. Many trees were knocked down but others left upright. Pg. 86- 94.

rumblings of the volcano caused fright among the rural population that led to many of them moving to the town before its destructive eruption—thus increasing the number of dead. The impact of the eruption was localized, but was highly variable in its flow pattern; and while it killed essentially every living thing in the path, it did not completely destroy the structures on land— parts of buildings were left standing, and even some trees though bent, burned and torn, remained upright and in situ.

c.) Pompeii and Herculaneum: These Roman towns, which lie at the base of Mount Vesuvius (**Figure 7a**), were destroyed on August 24th 79 A.D. and remained mostly untouched until 1748.⁴²⁰ Pompeii was buried in up to 30 feet of ash and Herculaneum in up to 60 feet. Both had been in the direct path of the pyroclastic flow. While several thousand died in Pompeii, initially only about 200 hundred were found in Herculaneum—but later more were found at what had been the dock.⁴²¹

In Pompeii, many casts of bodies of animals and animals have been found in what appears to be their last state of struggle (**Figure 7b**). They appear to have been overcome by the gaseous fumes and ash and then rapidly buried. Some bones have been found and even some food stuffs—either carbonized or otherwise preserved in jars. Most of the wood ceilings had burned and collapsed, but the walls themselves remained standing (**Figure 7c**). This was again reflective of the heterogeneity of a pyroclastic flow.

Pliny, the junior, described the event from 15 miles away on the peninsula town of Misenum. Even at that distance, he and family members were rapidly overtaken the

⁴²⁰ *Wikipedia* "Pompeii.", <http://www.en.wikipedia.org/wiki/Pompeii>.

⁴²¹ J.J. Deiss, *Herculaneum Italy's Buried Treasure* (New York: Harper and Row Publishers, 1985).

second day by ash which turned the sky to darker than night, but he survived.⁴²²

Interestingly, there are many similarities between the events that happened at Martinique and at Pompeii though separated by almost 2000 years. In both cases they were prominent towns at the base of a volcano, known to be active; the volcano did give warning signs which were ignored by the authorities; pyroclastic flows destroyed both rapidly; and there were survivors outside the direct destruction that saw and reported it. Buildings and other structures were at least partially preserved while virtually all life in the path of destruction died.

d.) Surtsey: The recent and observed development of the volcanic island of Surtsey is included in this section as an example of the rapidity with which landforms can develop. The island is located off the coast of Iceland. Volcanic material from 130 meters below sea level broke the surface in November 1963 and the island created continued to have billows of ash and other matter till June 1967. Its maximum size was measured at one square mile in 1967 with a height of 570 feet above sea level. Life began to be observed on the island by the summer of 1964.⁴²³ This included butterflies, flies, and various microbes along with various plant forms.⁴²⁴

Thorarinsson, who studied and visited the island on several occasions, commented on the development of landforms. He noted that it only took months for water channels, sandy beaches, boulders and cliff faces with abrasion surfaces to develop (**Figure 8**).⁴²⁵

⁴²² Ibid Deiss (1985) pg 14 Pliny is quoted as stating "And now came the ashes, but at first sparsely. I turned around. Behind us, an ominous thick smoke, spreading over the earth like a flood, followed us. . . . we were enveloped in night-not a moonless night or one dimmed by a cloud, but the darkness of a sealed room without lights."

⁴²³ *Wikipedia.org*. "Surtsey." Accessed 11-27-09 .

⁴²⁴ Thorarinsson, S., *Surtsey The Island In The North Atlantic*, trans. S. Eysteinnsson (New York: The Viking Press, 1967), 37-38.

⁴²⁵ Ibid: Thorarinsson commented on pages 39-40, "On Surtsey only a few months

Sub-conclusions natural disasters:

Local and even regional flooding can produce great destruction, dependant on the velocity, mass of water involved, and the debris in the water. Volcanic events can combine with watery ones to create complex disasters. Seismic- earthquakes are often involved in both.

sufficed for a landscape to be created which was so varied and mature that it was almost beyond belief. During the summer of 1964 and the following winter we not only had a lava dome with a glowing lava lake in a summit crater and red-hot lava flows rushing down the slopes, increasing the height of the dome and transforming the configuration of the island from one day to another. Here we could see wide sandy beaches and precipitous crags lashed by the breakers of the sea. There were gravel banks and lagoons, impressive cliffs, grayish white from the brine which oozes out of the tephra, giving them a resemblance to the white cliffs on the English Channel. There were hollows, glens, and soft undulating land. There were fractures and faultscarps, channels and screes. There were often furious gales and sandstorms, which reduced the visibility to zero, and Aegir, the Northern counterpart of Neptune, dealt blows of no less violence. You might come to a beach covered with flowing lava on its way to the sea with white balls of smoke rising high up in the air. Three weeks later you might come back to the same place and be literally confounded by what met your eye. Now, there were precipitous lava cliffs of considerable height, and below them you would see boulders worn by the surf, some of which were almost round, on an abrasion platform cut into the cliff, and further out there was a sandy beach where you could walk at low tide without getting wet. The next time you came there, glowing lava-falls rush over the sea-cliff. One day, the surf had cut a large section out of a tephra wall. The next, the lava spread across the sandy beach, protecting the cliff from further inroads by the sea. In this way destructive and constructive forces waged a constant battle for this island, which is and will be a true paradise for geomorphologists.”

Trees can be an important indicator of the severity of the forces involved. Most flooding conditions damage trees-bending them, abrading the bark, but rarely are trees uprooted with limbs lost and bark striped. Yet there are events of ferocity such as that of the Mount St Helens volcanic eruption, in areas directly in front of the blast, which resulted in stripped branches, bark, and roots from trees. Trees further down the Toutle River Valley showed more of the typical deformation. Strata formation can be quite varied with only around 18 inches being deposited in the Sumatra Tsunami and up to 600 feet at Mount St. Helens. Erosion can vary as well, with the planing of some areas and deep escarpments in others. However, all these observed areas are local in extent.

Landforms that have the appearance of having been formed over a long periods of time can actually be formed within days to months.

The empirical observation of flooding and volcanic activity will be compared with the residue found in the geologic record. An attempt will be made to extrapolate the effects of these local destructive forces to broader regional and worldwide effects as they might relate to the Noah Flood. This will be done in the Discussion section.

B. Geology

Henry M. Morris succinctly summarized what should be expected, geologically, if the Noah Flood was a worldwide event. He stated in 1977:

“The flood model of geology can be examined in terms of five predictions: most or all formations should be explainable in terms of catastrophic intensities of the processes which formed them; evidence should exist of continuous deposition, without significant time gaps, of the entire column; the order of deposition in any local column should usually be in terms of increasing mobility and the elevation of ecological habitat of the organisms preserved as fossils in that column; the order of deposition in any formation should usually be the order implied by the hydraulic process producing it as a single depositional unit; because of the cataclysmic and complex geophysical phenomena associated with a worldwide

flood, there would be occasional exceptions to the order of fossil deposition specified as ‘usual’ in predictions (4) and (5).”⁴²⁶

1. Flood related strata:

It has been estimated that between 70-80% of the continental crust (as distinct from the oceanic crust) has been deposited by transport in water.⁴²⁷ As well, about 20% is volcanic in origin.⁴²⁸ (See **Figure 1a, b** for the distribution of sedimentary surfaces earth as found in North America and **Figure 2a-d** for examples of strata throughout the earth). It is hotly contested as to how the strata formed; some say with the progressive ingress and egress of inland seas over long periods of time,^{429,430,431} and others say that it occurred by rapid sequential deposition over a short period of time.^{432,433} Even the Himalayan Mountains have sedimentary strata, containing fossil material, on portions of them, thousands of feet above sea level (**Figure 3a, b**).⁴³⁴

⁴²⁶ H.M. Morris, *The Scientific Case for Creation* (San Diego, CA: CLP Publishers, 1977), 36-37.

⁴²⁷ M. Crawford, *Physical Geology* (Lincoln, NB: Cliff Notes, 1998), 23.

⁴²⁸ "Earth Science Facts," (Explorit Science Center), http://www.explorit.org/science/earth_science.html.

⁴²⁹ On pg 21 the authors stated that tectonic action affected deposition, and earlier they comment on episodic catastrophies (page 16), in the context of geologic eras. W.C. Krumbien and L.L. Sloss, *Stratigraphy and Sedimentation* San Francisco: W.H. Freeman and Co, 1963).

⁴³⁰ Ager stated on page xix “ I have summed up geological history as being like the life of a soldier: ‘ Long periods of boredom and short periods of terror.’” ... “ Just as Gibbon documented the decline and fall of the Roman Empire, so we may record the rise and fall of the trilobites or the periodic spreading and retreating of marine transgressions across our continents.” D. Ager, *The New Catastrophism* (Cambridge, ENG: Cambridge University Press, 1993), xix.

⁴³¹ D. Dixon and R.I. Bernor, eds., *The Practical Geologist* (New York: Simon and Schuster, 1992), 63.

⁴³² A. Snelling, *in the Beginning: Catastrophic Plate Tectonics*. (Florence, KY: Answers in Genesis, 2007), DVD format.

⁴³³ *In the Beginning Catastrophic Plate Tectonics* (Brunswick, OH: American Portrait Films, 1996), DVD format.

⁴³⁴ R.K. Dahal, "Geology of Nepal," 2006, personal home page, see Tethyan sediments, <http://www.ranjan.net.np/geologyofnepal.htm>.

Observations that argue for rapid sedimentation over a single large land mass are:

- a.) There are no worldwide geologic columns that contain all the strata,⁴³⁵ the standard column that is displayed is piecemealed together.⁴³⁶ Yet, there are regional similarities among land masses even separated by either the Pacific or the Atlantic Oceans.⁴³⁷
- b.) There are no uniform worldwide erosion surfaces that demarcate given geologic ages.⁴³⁸ They would be expected if there were large time gaps between various similar “aged” strata worldwide.
- c.) Many strata conform smoothly on top of the strata below without any evidence of a time gap between two distinctly different layers over vast areas (**Figure 4**).^{439,440,441} Others finely inter-digitate reflecting superficial mixing or erosion surfaces in a local area reflecting rapid intermittent movement of water in that area (**Figure 5**).⁴⁴² Dr. Snelling demonstrated that in eastern Utah to western

⁴³⁵ W.C. Krumbein and L.L. Sloss (1963), 8. The succession of layers in local stratigraphic columns are arranged, then they are “subdivided and differentiated into significant and useful units.” Finally, these “units and the physical and biologic events they represent must be related to their proper positions in terms of geologic history.” The geologic column is piecemealed together with data from various areas.

⁴³⁶ The initial geologic column was assembled from strata obtained throughout different areas of Europe. J. Gilluly, A. C. Waters and A.O. Woodford, *Principles of Geology* (San Francisco: W.H. Freeman and Co, 1975), 75.

⁴³⁷ On page 192 is a nice diagram showing the hypothesized conjunction of Africa and South America. David Lambert and the Diagram Group, *The Field Guide of Geology* (New York: Facts on File, 1988), 192.

⁴³⁸ H. M. Morris *The Scientific Case for Creation* (1977), 38.

⁴³⁹ *Ibid.*, 39.

⁴⁴⁰ A. Snelling, *Rocks, Strata and the Flood* (2007). Dr. Snelling mentions the “knife edge” contact between the Cococino Sandstone and the Hermit Shale.

⁴⁴¹ The Definition of conformable is, “A sequence of beds are said to be conformable when they represent an unbroken period of deposition. (page 99) The figure of the exposed interface of the Coconino Sandstone with the Hermit Shale demonstrates that these layers are conformed as there is no erosion surface between the two layers, and this occurs over a broad area. *The Penguin Dictionary of Geology*, 1978th ed., s.v. “conformable.”

⁴⁴² Personal observations in the Chinle Formation-Triassic.

Colorado the actual strata all conform onto each other with no extensive erosion until the upper layers.⁴⁴³ Some coal seams, interdigitate with sandy layers, and may represent a unique turbulent deposition of vegetation, but these are local events.⁴⁴⁴

d.) Turbidity flows are thought to be evidence of high velocity mud flows, covering, at times, hundreds to thousands of square miles over a very short period of time (**Figure 6a,b**).^{445,446} Evidence from other strata, in the Chinle Formation and also other levels, supports rapid widespread deposition (**Figure 7a,b; 8a,b**).^{447,448,449}

⁴⁴³ Dr. Snelling noted "more than 60% of the Phanerozoic geologic record represented in this diagram is claimed time gaps....Yet there is little to virtually no erosion on the strata surfaces below the claimed time gaps, as has already been well documented for that part of this strata sequence that outcrops in the walls of the Grand Canyon." He refers to diagram 50 in volume 2 of his book. A. Snelling, *Earth's Catastrophic Past* (Dallas, TX: Institute for Creation Research, 2009) volume 2, 594, 1086.

⁴⁴⁴ C. Weiland, *Stones and Bones Powerful Evidence Against Evolution* (El Cajon, CA: MasterBooks, 1998), 13-15.

⁴⁴⁵ S. Austin, *Geologic Evidences for Very Rapid Strata Deposition in the Grand Canyon* (El Cajon, Ca: Institute for Creation Research, 2003), DVD format.

⁴⁴⁶ A. Snelling, *Rocks, Strata and the Flood* (2007). Dr. Snelling comments that Ayers Rock demonstrates the features of turbidity flow strata and says that "Sediment slurries called Turbidity currents known to travel up to 70 mph, would have transported and deposited the 3-4 miles thickness of sand in a matter of hours." Features of Ayers Rock consistent with rapid deposition include sandstone grains of different sizes mixed together (didn't have time to settle out), jagged edges (there no time to smooth the edges by abrasion), and feldspar present (a mineral quickly eroded if given time). These are layered into beds that are 6,000 m thick, and tilted up to 80 degrees.

⁴⁴⁷ The thin widely spread Shinarump gravel layer-Triassic is discussed. They comment that the characteristics of the layer would require a significant velocity of water to spread this layer, only a few meters thick over the entire Western Region of the United States. A. Roth, *Evidences The Record and the Flood* (Loma Linda, CA: Geoscience Research Institute, 1990), VHS format.

⁴⁴⁸ Other authors, who do not appear to be catastrophists, have suggested that there were episodes of long wavelength tilting/low amplitude perturbations of the earth's surface to create such strata such as the Shinarump. They discount the suggestions, as being inadequate, of others that river systems draining from the highlands created this layer. P.L. Heller, K. Dueker and M.E. McMillan, *Post-Paleozoic Alluvial Gravel Transport as evidence of Continental Tilting in the U.S. Cordillera* (Geological Society of America Bulletin, September 2003)
[Http://faculty.gg.uwo.edu/heller/3Gravels%20Paper/%203Gravels'03.pdf](http://faculty.gg.uwo.edu/heller/3Gravels%20Paper/%203Gravels'03.pdf).

⁴⁴⁹ Baumgardner commented in 2002, "The ubiquitous presence of crossbeds in the sandstones, and even limestones, in Paleozoic, Mesozoic, and even Cenozoic rocks is strong testimony for high energy water transport of these sediments. Studies of sandstones exposed in the Grand Canyon reveal crossbeds produced by high velocity water currents that generated sand waves tens of meters in height. The crossbedded Coconino sandstone exposed in the Grand Canyon continues across Arizona and New Mexico

⁴⁵⁰ Further evidence also supports the concept that not only was the deposition rapid, but that the material being deposited was transported long distances before deposition and that it covered large areas, and was relatively homogeneous and thick, e.g. Coconino Sandstone (**Figure 9 a, b**).⁴⁵¹

e.) The general lack of bioturbation supports the concept of rapid deposition of strata.⁴⁵²

into Texas, Oklahoma, Colorado and Kansas. It covers more than 200,000 square miles and has an estimated volume of 10,000 cubic miles. When one looks for a possible source for this sand to the north, none is readily apparent. A very distant source seems to be required. The scale of the water catastrophe implied by such formations boggles the mind. Yet numerical calculation demonstrate that when significant areas of the continental surface are flooded, strong water currents with velocities of tens of meters per second spontaneously arise. Such currents are analogous to planetary waves in the atmosphere and are driven by the earth's rotation. This sort of dramatic global scale catastrophe documented in the Paleozoic, Mesozoic, and much of the Cenozoic sediments implies a distinctly different interpretation of the associated fossil record. Instead of representing an evolutionary sequence, the record reveals a successive destruction of ecological habitats in a global tectonic and hydrologic catastrophe." J. Baumgardner, "Highlights of the Los Alamos Origins Debate," (*Origins Debate held in Los Alamos, NM, 2002*), <http://www.icr.org/research/jb/debatehighlights.html>.

⁴⁵⁰ Austin has commented, "Billions of large orthocone nautiloids occur within an extremely persistent lime packstone bed of the Redwall Limestone through the Grand Canyon region, Arizona and Nevada. The platform facies of the packstone bed is 2 m thick... Orthocone nautiloids assignable to the genus *Rayonnoceras* show evidence that bodies occupied the shells during the mass kill and burial of the entire population. Shell orientation, inverse grading, outsized coral heads, and water-escape pipes indicate rapid deposition of the platform facies from a high-velocity, laminar, low-cohesion, fluidized dispersion of carbonate sand and silt." S.A. Austin, "Nautiloid Mass Kill and Burial Event, Redwall Limestone (lower Mississippi), Grand Canyon Region, Arizona and Nevada," in *Proceedings of the Fifth International Conference On Creationism held in Pittsburgh, PA, August 4-9, 2003*, (Creation Science Fellowship Inc, 2003), 55-99.

⁴⁵¹ A. Snelling, *Strata, Rocks, and Flood* (2007). Dr. Snelling stated regarding the Navajo Sandstone of the Jurassic Period, "The source of the zircon and quartz grains in the overlying Navajo Sandstone of southern Utah was in the Appalachians of Pennsylvania and New York." As well, the Coconino Sandstone is thought to come from the northern U.S. to cover most of the Southwest. It averages 315 feet thick and covers 100,000 square miles (260,000 km²), and could be double the size. The volume is 10,000 cubic miles (42,000 km³). He states that it was, "Deposited as multiple sheets with sand waves up to 60 feet (18 meters) high by water moving at 3-5 miles per hour. (5-8 km per hour)... At this rate the whole Coconino Sandstone would have been deposited in just a few days." and the sum total of deposition of the Grand Canyon sequence in "just a few weeks".

⁴⁵² J. Morris commented regarding bioturbation, "Geologists have traditionally surmised that deposits are typically the results of the calm and gradual, uniformitarian processes currently in operation. Conversely, more recent geologic models recognize that processes of the past acted at rates, scales, and intensities far exceeding those of today. They were the same basic processes, but were acting at catastrophic levels, accomplishing much depositional work in a short time... While the muddy sediments are still fresh and soft, the ephemeral sedimentary structure within the deposits is in jeopardy of being obliterated by the action of plant and animal life. We know that life proliferates in every near-surface layer of soft sediment... Numerous recent deposits, dominated by sedimentary structure, were investigated in a natural setting. It was observed that within months, all sedimentary structure was destroyed, so intense was the bioturbation in soft sediments." In conclusion he stated, "Each layer (strata), was laid down in a short

- f.) Radiometric dating, particularly C^{14} in fossils, gives consistently similar ages for widely separated (in depth) strata. Coal from the Pennsylvanian Period and the Eocene gave similar C^{14}/C ratios.⁴⁵³ C^{14} has been found in fossil wood from the Middle Triassic (assumed 225-230 my), Lower Triassic (assumed 189 myo), and the Tertiary (assumed 30 my). The C^{14} dates gave ages for all these periods of about 30,000 years (**Table 1**).^{454, 455, 456, 457, 458, 459} This argues that the organic remains of all life were buried at approximately the same time, regardless of the strata they are found in.
- g.) There are many examples of organic life forms—plant, animal, and microbes that have documented representatives that span broad ranges of stratigraphic layers, i.e. across several “geologic ages”. Some of these continue to have living

period of time. The deposit could not have been exposed for long before the next deposit covered it, isolating it from the destructive bioturbation.” J. Morris, "Sedimentary Structure Shows a Young Earth," *Acts & Facts* 38(7) (2009): 15. As well, it should be noted that most strata do not have any bioturbation—which argues for rapid sequential deposition before any disruption by plant or animal life could occur as many of these strata have fossil remains within them.

⁴⁵³ J. Buamgardner, "14C Evidence for a Recent Global Flood and a Young Earth," in *Radioisotopes and the Age of the Earth Volume 2*, ed. L. Vardiman, A.A. Snelling, and E.F. Chaffin (El Cajon, CA and Chino Valley, AZ: Institute for Creation Research and Creation Research Society, 2005), 587-630.

⁴⁵⁴ A. A. Snelling commented, "The fossil wood in the top three metres of the Marlstone Rock Bed near Banbury, England, has been 14C 'dated' at 23,000-23,500 years BP. However, based on evolutionary and uniformitarian assumptions, the ammonite and belemnite index fossils in this rock 'date' it at about 189 million years. Obviously, both 'dates' can't be right." A.A. Snelling, "Geological Conflict," *Creation* 22(2) (March-May 2000).

⁴⁵⁵ A.A. Snelling reported on C^{14} wood encased in basalt. The date for the basalt encasing the wood was dated around 37 my, and the wood 38,000 years old. He comments that the dating of the basalt is based on unproven assumptions, and that the two dating methods are in conflict with each other. Snelling, A, "Radioactive 'Dating' in Conflict," *Creation* 20(1) (December-February 1997-1998).

⁴⁵⁶ A. A. Snelling, "Dating Dilemma: Fossil Wood in 'Ancient Sandstone,'" *Creation* 21(3) (1999) 39-41.

⁴⁵⁷ A.A Snelling, "Conflicting Ages of Tertiary Basalt and Contained Fossilized Wood, Crium, Central Queensland, Australia," *Technical Journal* 14(2) (2000).

⁴⁵⁸ B.S. Kues, *Fossils of New Mexico* (Albuquerque: University of New Mexico Press).

⁴⁵⁹ Giem gives a nice summary of the data. He graphs out the C^{14}/C ratios as found in many different carbon containing fossils of supposed different ages. Giem, P, "Carbon-14 Content of Fossil Carbon," *Origins* 51 (2001), <http://www.grisda.org/origins/51006.htm>.

representatives—e.g. nautilus (**Figure 10 a-f**)^{460,461}, ginkgo plant (**Figure 11a,b**)⁴⁶², and the “Dragon Fly” (**Figure 12a-c**)⁴⁶³ among many others; and thus are called by some researchers as “living fossils”. Most of these “living fossils” are the sole representatives of larger groups of fossils of similar structured life forms—e.g. ginkgo plant.⁴⁶⁴

h.) Berthault has demonstrated in few studies that rapid sedimentation and stratification can be empirically demonstrated over very rapid and short periods of time.^{465, 466}

⁴⁶⁰ This book referred to the Nautilus as "the last genuine living fossil" (of the cephalopod group Tetrabranchiata) which "inhabits circumscribed areas of the Pacific and Indian oceans..." It is similar to the Jurassic nautilid genus *Cenoceras*. V. Turek, Marek, J. and J. Benes, *Fossils of the World* (NY,NY: Arch Cape Press, 1989), 243.

⁴⁶¹ On page 6 is a graph of the genera of nautiloids during different time periods. It reveals a dramatic drop off in the upper strata of the earth, throughout the earth, through to present. There is only one living form of the Nautilus. While the number of genera and what genera are genetically or progenically related is controversial, it is clear there has been a massive die-off of the nautiloids. B. Kummel, *American Triassic Coiled Nautiloids* (Washington, DC: USGS), 6, United States Government Printing Office, # 250, 1953.

⁴⁶² V. Turek, Marek, J. and J. Benes, *Fossils of the World* (NY,NY: Arch Cape Press, 1989),74. Regarding the ginkgo the authors stated, “Plants allied to the genus *Ginkgo* can already be found in Upper Triassic sediments all over the world. It is remarkable that they also appeared in very high latitudes, such as Franz Josef Land, Greenland and Patagonia. During the roughly 150 million years (the authors’ belief) of their existence, ginkgos have not undergone any fundamental changes and their last remaining representative, *G. bilboa*, is a popular example of a ‘living fossil’.”

⁴⁶³ Very similar fossil "Dragonflies", as compared to living ones, occur in the Jurassic strata. G.R Case, *A Pictorial Guide to Fossils* (NY,NY: Van Nostrand Reinhold, 1982), 151-153.

⁴⁶⁴ Ginkgo leaves virtually identical to the living *Ginkgo bilboa* are found in designated Cretaceous strata, but are also assigned to leaves that are somewhat in appearance even back to designate Permian strata. While there are similar structures, and yet differing ones as well, it cannot be implied that they are genetically related. See section in science in this present work.

⁴⁶⁵ In Snelling’s *Earth’s Catastrophic Past* (2009) page 949, Berthault’s experiment is cited as evidence for, “Not only are there numerous modern examples where natural catastrophic events accumulated rapidly, but horizontal laminae in fine-grained sediment have been produced by high-velocity currents in an experimental circular flume. Other experiments also show that sediments consisting of a homogenized mixture of clay and silt can sort themselves into thin laminae at a rate of several per second, producing a turbidite-like deposit. Even experiments where the sediment was allowed to settle in quiet water without lateral transport, several laminae formed in a few hours.”

⁴⁶⁶ Berthault summarized much of his work on sedimentation of various sized earthy particles as well as citing recent field studies, done by Russian scientists, on the depositional rate of strata from the Crimean Peninsula. Significant findings of his studies showed 1) simultaneous deposition of layered strata based on particle size and current flow which resulted in lateral not vertical development of the strata, and 2) bedding planes occurring by desiccation. He also noted that noted that "radioactivity is independent from

Other fossil organic life forms cover broad numbers of strata or “geologic ages”, but do not have present living representatives, e.g. the ammonites. However, Woodmorappe has criticized the use of the cephalopods for organizing strata into progressive long age-related sequences stating, “Much of the stratigraphic order (generic, specific) ascribed to ammonoids is actually due to time-stratigraphic concepts and to taxonomic manipulations. Indeed the ‘condensed’ sequences demonstrate rather mixing with cataclysmic burial. The known ecological positions of cephalopods independently fit together into a mutually contemporaneous ecologically zones coexistence. The actual stratigraphic order (ordinal, familial) owes its existence to the burial of these ecological zones in the Flood, while physical sorting during burial gave rise to interfamilial stratigraphic order.”⁴⁶⁷ Oard also gives an example of an organism not only spanning a broad range of “geologic ages” but of being found in widely separated strata geographically.⁴⁶⁸

the physical or chemical state of the sample and thus is not influenced when a sample changes from magma to rock.”

He also noted that the findings of field studies of the Russian team showed that the observed depositional rate was 0.01% of that expected from the geological timescale.

Thus he concluded, “Paleohydraulic analysis can approximate the time required for the sedimentation of a sequence much more accurately than conventional stratigraphy, which tends to grossly overestimate the time required.” G. Berthault, "Time Required for Sedimentation Contradicts the Evolutionary Hypothesis," *Creation Research Quarterly* 46 (2010): 261-269.

⁴⁶⁷ Woodmorappe also comments that the concept of "convergence" also argues for creation of and not evolution of the cephalopods. J. Woodmorappe, "The Cephalopods in the Creation and the Universal Deluge," *Creation Research Society Quarterly* 15(2) (1978).

⁴⁶⁸ Oard commented, “It is unfortunate but true. Similar fossils can be given different names when found in strata of divergent supposed ages. This practice masks the true range of the fossil within the geological time scale. In a recent example, even though the fossils were almost identical, they were assigned to different species. Such practices multiply the number of names, confuse our knowledge of fossil distribution, and hide the fact that the geological column may well be compromised.” He goes on to mention the sponge *Nucha? cancouverensis* sp. Nov. found in the chalk beds of Vancouver, BC. They are dated as of the “Triassic Period.” Similar ones (the reason for the question mark in the name), have also been found in New South Wales, Australia from the “Cambrian” Period. These findings are complicated (to long age advocates and are called ‘conundrums’) by the observation that the *Nucha* are not found **between** the Cambrian and the Triassic, and these fossils are **on opposite sides** of the projected “Pangea.” M. Oard, "How well do Paleontologists know Fossil Distribution," *Technical Journal (now Journal of Creation)* 14(1) (2000):7-8.

Thus there are fossil forms that have remained unchanged throughout much of geological time, and are as well found among several continents (**Table 2**).

- i.) There is evidence that the stratigraphic principles set up by Steno⁴⁶⁹ may be partly invalid. The concept of superposition of newer strata over older consolidated may not be correct. Steno worked from static post deposition data, but recent empirical data on the observations of actively deposited heterogeneous particulate granules demonstrates that there can be continuous stratified layering of the material under a watery current.⁴⁷⁰ Thus, there may be no real time differential between strata, as they can be simultaneously deposited. The Tonto group of the Grand Canyon is used as an example of this process on a large scale.⁴⁷¹

⁴⁶⁹ Steno, *Dissertation Prodomus*, 1669.

⁴⁷⁰ Berthault referred to 3 principles of Steno, 1) principle of superposition— where younger strata overlay older ones; 2) principle of continuity- sediments were originally in a fluid as they were deposited; 3) principle of original horizontality—strata were laid down horizontal to the horizon. He demonstrated data that showed that number 1 and 3 were not necessarily correct, and clarified the conditions for number 2. For evidence against number 1 he noted that seafloor drilling had detected that "the first semiconsolidated sediments appeared at a depth of about 400-800 m." Regarding the 3rd principle he noted that, "No sedimentary layer extends around the Earth. Seismic readings and submarine coring demonstrate that the strata in oceanic deposits are not always horizontal and the sedimentation rate in oceans is not universal on a global scale of the Earth." Regarding the second principle he, Berthault, noted that neither Steno nor current commentary on the fluid deposition of strata make any or little reference to current velocity and the impact that it could potentially have on the deposits. This author then goes on to demonstrate that 1) heterogeneous particulate matter stratifies out into various layers depending on the particle size and the velocity of the watery flow. He also demonstrated that laminar deposition of material can occur on slopes of up to 30-40 degrees. Thus he commented, "Rather than successive sedimentary layers, these experiments demonstrate that stratification under a continuous supply of heterogeneous sandy mixtures results from segregation for lamination, non-uniform flow for graded beds, and desiccation for joints. **Superposed strata are not, therefore, necessarily identical to successive sedimentary layers.**"[bold type inserted] G. Berthault, "Analysis of Main Principles of Stratigraphy on the Basis of Experimental Data," *Lithology and Mineral Resources Translated and Published by MANK "HAYKA/INTERPERIODICA" PUBLISHING* (September-October 2002), <http://www.kolbecenter.org/> (accessed February 22, 2010).

⁴⁷¹ The author comments, "The sedimentary genesis of the Tonto Group is explained by simultaneous prograding of the strata both laterally and vertically and movement of the sedimentation area from east to west. This explanation does not correspond to the stratigraphic concept of successive horizontal layers. It may be asked whether this simultaneity of deposition in the Tapeats, might extend to Bright Angel and Mauv. In other words could a particle of clay (Bright Angel) deposit in zone 5 at the same time as a particle of sand in zone 4?...Bright Angel, therefore progressively covers Tapeats from west to east in zones 5 and 6. At the same time, in zones of hydrodynamic (zones 2, 3 and 4) deposit of Tapeats

Several geologists have developed stratigraphic classification schemes that are consistent with a worldwide flood and thus a short age, i.e. thousands of years, for the existence of the earth and its crust.^{472, 473, 474}

2. Plate Tectonics and a Unified Land Mass:

The concept of one original unified land mass, which subsequently broke up, began to be postulated in scientific literature in 1596 by Abraham Ortelius.⁴⁷⁵

This concept continued to be propounded by others such as Burnet (1691)⁴⁷⁶

sandstone continued. **Thus, deposition of the Tonto Group occurred not successively as expressed by the principle of superposition... This analysis is in conformity with the results of our laboratory experiments in the University of Colorado.**" G. Berthault, "Sedimentological Interpretation of the Tonto Group Stratigraphy (Grand Canyon Colorado River)," *Lithology and Mineral Resources* 39(5) (2004), <http://www.kolbecenter.org/> (accessed February 22, 2010).

⁴⁷² S.A Austin, *Grand Canyon Monument to Catastrophe* (Santee, CA: Institute for Creation Research, 1994), 55-80 with figure on 58.

⁴⁷³ C.R Froede, *Geology by Design Interpreting Rocks and Their Catastrophic Record* (Green Forrest, AR: Master Books, 1998, 2007), 8-26.

⁴⁷⁴ T. Walker, "A Biblical Geologic Model," in *Proceedings of the Third International Conference on Creationism held in Pittsburgh, PA, July 18-23, 1994*, ed. R.E. Walsh (Pittsburgh, PA: Creation Science Fellowship, Inc, 1994), 581-592.

⁴⁷⁵ U.S. G.S., *This Dynamic Earth a Historical Perspective* (Washington D.C.: Government Publications, Updated 1-13-09 online) Plate tectonics, <http://pubs.usgs.gov/publications/text/historical.html>. Ortelius was said to have suggested that the Americas were 'torn away from Europe and Africa... by earthquakes and floods'..."

⁴⁷⁶ On pages 27 (Chapter II) Burnet wrote, "Sixteen Hundred and odd years after the Earth was made, and inhabited, it was over-flow'd, and destroy'd in a Deluge of water. Not a Deluge that was National only, or over-run some particular Country or Region, as *Judea* or *Greece*, or any other, but it overspread the face of the whole Earth, from Pole to Pole, and from East to West, and that in such excess, that the Floods over-reacht the Tops of the highest Mountains; the Rains descending after an unusual manner, and the fountains of the *Great Deep* being broke open; so as a general destruction and devastation was brought upon the Earth, and all things in it, Mankind and other living Creatures; excepting only Noah and his Family, who by a special Providence of God were preserv'd in a certain Ark, or Vessel made like a ship, and such kinds of living creatures as he took in to him." Further, on pages 65-66 Burnet stated, "We must remember that St. Peter told us, that the Ante-diluvian Earth perish'd, or was demolish'd, and Moses saith, the great *Abyss* was broken open at the Deluge. Let us suppose, that at a time appointed by Divine Providence, and from Causes made ready to do that great execution upon a sinful World, that this *Abyss* was open'd, or that the frame of the Earth broke and fell down into the *Great Abyss*. At this one stroke all Nature would be chang'd, and this single action would have two great and visible Effects. The one Transient, and the other Permanent. First an universal Deluge would overflow all the parts and Regions of the broken Earth, during the great commotion and agitation of the *Abyss*, by the violent fall of the Earth

(**Figure 13**) and Catcott (1778).^{477, 478} One author in 1736 proposed a sinking of portions of the unified land mass by a shifting of the great abyss resulting in the separate continents (**Figure 14**).⁴⁷⁹ This concept of separate land masses, from one land mass, due to the sinking and arising of it out of the waters was still being propounded in 1906.⁴⁸⁰ Yet, Snider-Pellegrini in 1858 more correctly surmised that the continental crust had been one piece that had broken apart (**Figure 15**).⁴⁸¹

Even the geographer Humboldt, in 1849, commented on the commonality of fossils and strata on different continents and thus the likelihood of a unified land

into it. This would be the first and unquestionable effect of this dissolution, and all that World would be destroyed. Then when the agitation of the Abyesse was asswag'd, and the Waters by degrees were retir'd into their Channels, and the dry land appear'd, you would see the true image of the present Earth in the ruins of the first. The surface of the Globe would be divided into Land and Sea; the Land would consist of Plains and Valleys and Mountains, according as the pieces of this ruine were plac'd and dispos'd: Upon the banks of the Sea would stand the Rocks, and near the shoar would be Islands, or lesser fragments of Earth compass'd round by Water.... I think it will be easily allow'd, that such a dissolution of the Earth as we have propos'd, and fall of it into the Abyesse, would certainly make an universal Deluge; and effectually destroy the old World, which perish'd in it." His concept of the earth pre-flood as stated in Chapter 5 (the second proposition) was that there were no mountains or seas and that it was smooth. Burnet, Thomas, *Sacred Theory of the Earth* (London: R. Norton, 1691; repr., Carbondale, Illinois: Southern Illinois University Press, 1965) 65-66.

⁴⁷⁷ Catcott, 1768.

⁴⁷⁸ Many of the early scientists of the 1500-1700's accepted a literal account of the creation and the flood. In Genesis 1:6-10 it is stated, "Again God said, 'Let there be a firmament in the midst of the waters: and let it separate the waters from the waters. Then God made the firmament, and separated the waters which were under the firmament, from the waters which were above the firmament: and it was so. And God called the firmament Heaven. 'So the evening and morning were the second day. God said again, Let **the waters under the heaven be gathered into one place**, and **let the dry land appear**: and it was so. And God called the **dry land, Earth**: and he called the **gathering together of the waters, Seas**: and God saw that it was good.'" (Geneva Bible 1640/44) It was understood that the earth was gathered in one spot and the waters into another, and they wrote their studies within this context.

⁴⁷⁹ Epigrams and Corks, "Account of the Deluge. Burnet and Whiston Mistaken," *The Gentleman's Magazine*, December, (1736)731-733. They emphasized the massive shifting of waters from side to side of the planet, exposing ocean bottoms and covering the land.

⁴⁸⁰ E.H.L. Schwarz, "The Former Land Connection between Africa and South America," *The Journal of Geology* (February-March 1906), www.google.com, 81-90.

⁴⁸¹ USGS, *This Dynamic Earth: Historical Perspective* (Washington, DC: Government Printing Office, January 1 2009), 1-5, <http://pubs.usgs.gov/publications/text/historical.html>. Accessed 6/23/2010.

mass at one time.⁴⁸² Dana in his classic textbook on geology, as well, commented on the commonality of various species of animals on different continents.⁴⁸³

Within the last one hundred years the idea of one initial land mass which subsequently broke up has become re-accepted because of the documentation of common strata on separated continents (**Figure 16**), and common fossils on these separated areas (**Figure 17; 18a-c; 19a-c; 20a-d; 21**).^{484, 485, 486, 487, 488, 489, 490} It is

⁴⁸² A. vonHumbolt, *Cosmos: A Sketch of a Physical Description of the Universe* (London: Henry G. Bohn, 1849), 279.

⁴⁸³ On page 515 he states, " Out of 180 species from the Eocene beds of Haring, 55, according to Ettinghausen, are Australian in type, 28 East Indian, 23 tropical American, 14 South African, 8 Pacific, 7 North American and Mexican, 6 West Indian, 5 South European... In the Miocene of Vienna, nearly a third are North American in type..." On pages 826-27 he briefly discussed the lateral pressure of land masses to create mountains, and on page 830 he discussed the lands being overflowed by waters initially (at creation) and then rising out of them. He did not accept a universal flood. J.D. Dana, *Manual of Geology: Treating of the Principles of the Science* (New York: Ivison, Blakeman, Taylor, and Co, 1880, 3rd edition) 515.

⁴⁸⁴ D. McCarthy, "The Trans-Pacific Zipper Effect: Disjunct Sister Taxa and matching Geological Outlines that Link the Pacific Margins," *J. Biogeography* 30 (2003), 1545-1561.

⁴⁸⁵ D. Ager on page 15 stated, "Yet it is the common experience of most palaeontologists that, just as lithological facies are persistent around the world, so are the fossils which they contain... One example is the late brachiopod **Halorella, which is large and distinctive and which has been recorded from every continent except Antarctica**, in rocks dating from quite a small span of late Triassic time... It has no apparent direct ancestors or descendants, yet it turns up simultaneously in places as far apart as Indonesia, northern Siberia, Turkey, and Nevada. What is more, these forms are not only the same genus, but also the same species, and the Nevadan specimens have even (very justifiably) been put in the same subspecies as a form in the Austrian Alps." D.V Ager, *The Nature of the Stratigraphical Record* (New York: Macmillan, 1973), 15.

⁴⁸⁶ The authors emphasis the use of tetrapods to correlate "late Triassic" strata throughout the continents of North America, South America, Europe, Africa, India, but disagree with others on whether to include China (page 143). For examples, on page 153 they list the *Placerias* and tracks on pages 154. Interestingly they comment on having to use tetrapod fossil remains, instead of tracks, from marine sediments in Italy and Austria (page 145). P.M. Letourneau, and P.E. Olsen, *The Great Rift Valleys of Pangea in Eastern North America*, ed., *Sedimentology, Stratigraphy, and Paleontology* (New York: Columbia University Press, 2003). These are good examples of the lateral extension of similar fossil types across continents.

⁴⁸⁷ On Pages 449-50 the author stated, "After reading the following summary of the history of Ginkgo and its allies it will be easier to appreciate the reasonableness of describing the Maidenhair tree as one of the wonders of the world; it has persisted with little change until the present through a long succession of ages when the earth was inhabited by animals and plants for the most part far removed, in kind as in time, from their living descendants. Ginkgo is one of a small company of living plants which illustrates continuity and exceptional power of endurance in a changing world. The ginkgos that grew in western and eastern forests 100 and 200 million years ago were no doubt very similar in appearance to the species that alone survives; they lived the same life, depending upon the light of the sun, the carbon-giving gas in the atmosphere, and the water in the soil exactly as the trees of the present day." Sir A.C Seward,

important to note that these fossils that transcend separated continents are also found in different strata—e.g. the brachiopod *Halorella* (Triassic) and the ginkgo leaf (Jurassic). Some have called the initial single land mass “Rodina”.⁴⁹¹ It is now argued that by the action of plate tectonics this single unit of land was sequentially broken up into smaller continental land masses.^{492, 493} Rifting of the

"The Story of the Maidenhair Tree," *Science Progress*, 32:127 (1939):441-460. Figure 1 in his article demonstrated the distribution throughout all the major continents of the earth of the ginkgo and its “allied genera”.

⁴⁸⁸ The authors argue for identification of the *Coelophysis* type locality being from the Upper Triassic Chinle Group near but not at Ghost Ranch R.M.; Lucas Sullivan, S.G.; Heckert, A.; and Hunt, A.P, "The Type Locality of *Coelophysis*, a Late Triassic dinosaur from north-central New Mexico (USA)," *Palaont. Z* 70 (1996): 245-255.

⁴⁸⁹ These authors argued for a nearly identical skull found in Zimbabwe as compared to that from New Mexico and stated, "Several authors have drawn attention to the close similarities between the neotheropod dinosaurs *Coelophysis* and *Syntarsus*...we conclude that *Syntarsus* is a junior synonym of *Coelophysis*. Variations are noted in three cranial characters...that taken together with the chronological and geographical separation of the two taxa justify separation at species level." That is, the fossil forms from the Southwest USA in North America and those from Zimbabwe, Africa are nearly identical. A. Bristowe and M.A. Raath, "A Juvenile *Coelohysoid* Skull from the Early Jurassic of Zimbabwe, and the Synonymy of *Coelophysis* and *Syntarsus*," *Palaeont. Afr* 40 (December 2004): 31-41.

⁴⁹⁰ These authors commented on the association of European *Grallator* to American *Coelophysis* tracks, "Although we do not know which dinosaur species made this type of *Grallator* track, the foot of *Coelophysis*, a well-known contemporary theropod from North America, fits the footprint well." M. Lockley and C. Meyer, *Dinosaur Tracks and Other Fossil Footprints of Europe* (New York: Columbia University Press, 2000), 80-81.

⁴⁹¹ The original pre-Flood supercontinent has been referred to as “Rodinia”. In a secular context Rodinia would be regarded as a late Precambrian supercontinental configuration—which would fit exactly a pre-Flood configuration. “Pangea” was a supercontinental configuration during the Flood. The continental fragments that broke apart from Rodinia at the beginning of the Flood collided after having some Flood sediments deposited on them.” Mountain building and oceans developed during this time. Email from Dr. A. Snelling.

⁴⁹² D. Lambert and some other geologists also envisage a coming and parting of continents before and after “Pangea”. Thus a history of a unified land mass is recognized by the greater secular geological community. D. Lambert, *The Field Guide to Geology* (New York: Facts on File, 1988), 188-213.

⁴⁹³ The secular uniformitarian concept of one land mass supercontinent and then the subsequent plate tectonic separation into several smaller continents began with the observation by Adolphe Bronquart identifying and naming *glossopteris* which he had found in India in 1822. Eduard Suess then recognized that *glossopteris* was found in South America, South Africa, India, Australia, and Antarctica. He proposed that these continents were one land mass and coined the name Gondwanaland in 1861. In 1915 Alfred Wegner proposed that Gondwanaland and another land mass he called Laurasia were actually part of a greater one he called Pangea or “all earth”. He then proposed that these broke apart by the process of plate tectonics into the smaller continents that we have today. See Wikipedia.com under the name of each scientist for further information. (See figure 17 for a photograph of *glossopteris* from Australia, and the distribution of it within the fossil record.)

continents apart appears to occur by mid oceanic fissures and volcanic activity.⁴⁹⁴ The movement of the continents can be measured.^{495,496} Mountain lifting due to plate collisions is being studied, but according to Dr. John Baumgardner the present mountain systems are not consistent with the processes being advocated for their development. He has advocated for rapid isostatic equilibrium that drove the development of mountain systems.⁴⁹⁷ As well, Baumgardner has developed a sophisticated computer modeling program to model rapid plate movements in a worldwide catastrophe.^{498,499,500}

It now appears that the continental crust was at a given time one smooth flat (but curved to the arch of the earth) unit. It was surrounded by oceanic crust and separated from it. An event occurred that caused it to be subsequently broken apart, to then be completely covered by a watery destruction which altered its

⁴⁹⁴ The authors concluded the rifting and breaking of continents by stating, "The evidence points to a nearly synchronous event of cogentic fissure eruptions, with rapid production of at least 10^6 km³ of an initial rift magma along a pre-Atlantic zone from northern South America and Europe, as originally assembled with Pangea. Very similar IPR dikes and basalts are found from Virginia to eastern Newfoundland, in northwest Africa, and in Iberia. As pointed out recently, the distribution of these igneous features does not support an origin from a single plume or 'hot spot' source, but their magmatic uniformity requires a huge linear zone of eutectic-like mass melting, under conditions similar to some other major flood basalts events." P.M. Letourneau and P.E. Olsen, *The Great Rift Valleys of Pangea in Eastern North America*, ed., *Tectonics, Structure, and Volcanism* (New York: Columbia University Press, 2003), 149-50.

⁴⁹⁵ A. A. Snelling quoted J. Cann from "Subtle Minds and Mid-Ocean Ridges", *Nature* (1998) 393:625,627. In: A. A. Snelling, "A Catastrophic Breakup. A Scientific Look at Catastrophic Plate Tectonics," *Answers Magazine* 2(2) (2007): 44-48.

⁴⁹⁶ Dr. Snelling has argued for a very rapid initial subduction of the oceanic crust under the continental crust with the resultant rapid separation of the continents based on the computer of J. Baumgardner (see below). *The Flood*, DVD, A. Snelling, (Answers in Genesis, 2009).

⁴⁹⁷ J. Baumgardner, "Recent Rapid Uplift of Today's Mountains," *Impact Institute of Creation Research*, no. 381 (2005).

⁴⁹⁸ J. Baumgardner, "Catastrophic Plate Tectonics: The Physics Behind the Genesis Flood," in *Proceedings of the Fifth International Conference on Creationism held in Pittsburgh, PA, August 4-9*, ed. R.Ivey (Pittsburgh, PA: Creation Research Fellowship Inc, 2003), 113-126.

⁴⁹⁹ J. Baumgardner, "Computer Modeling of the Large-Scale Tectonics Associated with the Genesis Flood," in *Proceedings of the Third International Conference on Creationism July 18-23*, ed. R.E. Walsh (Pittsburgh, PA: Creation Science Fellowship, 1994), 49-62.

⁵⁰⁰ J. Baumgardner in *Proceedings of the Fifth International Conference on Creationism* (2003) "Runaway Subduction as the Driving Mechanism for the Genesis Flood", Pg 63-75.

surface. It appears that mountain development has occurred as the divided (broken) continental plates progressively collided together and temporarily reassembled into Pangea during and after the breakup of that single crustal land mass while the inundation occurred.

3. Evidence for Massive Erosion from off the Continental Crust

There exists evidence for massive amounts of sediments having been eroded off the continental crustal earth. Nowhere on the earth is the complete geological column found; there are huge gaps within it.^{501,502,503} So it is hypothesized that in

⁵⁰¹ The authors state on page 75, "The present standard geologic column was pieced together in Europe during the nineteenth century by expanding the stratigraphic sequences of Smith and Cuvier and Brongniart into the rest of Europe. The fossil assemblages in these strata are those to which all others are ultimately compared, the world over, and theirs is the standard sequence... As stratigraphic work was extended, however, fossil assemblages intermediate between those of adjacent European "type systems" were found;... Even the gap between the Paleozoic and Mesozoic strata, long thought to be unrepresented by any marine beds, is bridged by virtually complete sequences in Nevada, Greenland, and the Himalayas." Waters, A.C. Gilluly, J. and A.O. Woodford, *Principles of Geology* (San Francisco: W.H. Freeman and Company, 1975), 75,78. Thus, the European "type" column was found to have numerous gaps when compared with strata elsewhere. This would be expected if massive flooding with ebbing and flowing of muddy layers resulted in irregular deposition and erosion.

⁵⁰² While the exact contact surface may be sharp (see the contact surfaces of the Coconino Sandstone in the Grand Canyon) the broad sweeping area of contact may not be planar through an entire region. In McGee et. al. he demonstrated this nicely regarding the Chinle and Moenkopi Formations in figure 15 of his book. As well, the underlying stratigraphic units, of a given formation, vary within regions (See Plates 2, 6 of McKee et. al.). These are called unconformities. This has presented geologists with considerable difficulties in assigning sequential rock units from region to region. McGee recognized these difficulties. He addressed this on page 5 of his book. There he commented that for boundaries to be set one needed rock stratigraphic and time stratigraphic units. The first was, and is, simply the physical description of a composite strata, but the second is much more problematic. It requires the identification of "isochronous surfaces" that are extended into wide regions. They were, are, to represent the "material units, each of which comprises all rocks formed in an interval of geologic time defined by the beginning and ending of deposition or other mode of origin of those rocks contained in the type section... ideally these boundaries are independent of lithology, fossil content, and any other basis of stratigraphic division." But he, McGee, then goes on to quote another geologist that in practice, "material rock units (are) defined in their type area by agreement among stratigraphers, elsewhere by criteria of (time) correlation found in the contained rocks; that is, by physical properties, fossil content, or radioactive age determination believed by practicing stratigraphers to indicate time-equivalence with the type...unit. E.D. McKee et. al., *Paleotectonic Maps* (Washington, D.C., 1959), plates 2 and 6, page 5.

⁵⁰³ Read and Burdick in their short pamphlet demonstrate many problems with time stratigraphic sequencing and show it tied to the circular reasoning of the assumptions of long ages of the earth and evolutionary theory. J.G. Read and C.L. Burdick, *Fossils, Strata, and Evolution A Test of the Credibility of the Evolution Theory* (Culver City, CA: Scientific-Technical Presentations, 1979), 45. In concept, the huge gaps of strata found throughout the fossil record can be due to either strata having never been laid down secondary to the effects of the ingress and egress of the waters or the impact of massive erosion throughout the flooding and post- flooding event.

some areas the strata never existed, and in others that it was eroded off before the subsequent strata were laid down. Long ages are proposed for this, but the evidence is lacking for these long ages to erode such massive amounts of strata.⁵⁰⁴

The area of the Southwest United States represents a good example of massive erosion. If a geological cross-section, northwest to southeast, is taken from Zion Canyon in Utah through the Grand Canyon and onto the Painted Desert area of Arizona one can see where at least the Chinle and Moenkopi Formations have been eroded away over at least 200 miles. At Zion the Chinle and Moenkopi strata are at the base of the canyon, but at the Grand Canyon there is only one small butte, called Red Butte, just south of the canyon rim that remains of the Moenkopi in the whole region (see **Figure 22**). Yet the Chinle and Moenkopi return, still largely eroded in the Painted Desert area and on into western New Mexico where they are then again covered by other strata. That there is this one small butte on top of the Monocline that Grand Canyon cuts through⁵⁰⁵ is adequate proof that the Moenkopi had been deposited on top of the Kaibab strata in that area. This requires that large volumes of strata over a broad area to have been subsequently removed,⁵⁰⁶ and this is not explained by current

⁵⁰⁴ H.M. Morris, *The Scientific Case for Creation* (1979) lists the formation of river deltas as data for the age of a young earth- at 5000 years. Rivers are depositing deltas at a much smaller amounts and rates than that needed to account for the large gaps of strata, and valleys, canyons, presently on the earth.

⁵⁰⁵ It has not been adequately proven how the Grand Canyon has cut through an elevated region, as the start of the Colorado River is lower than the top of the monocline. Steve Austin commented, "Why should the *westward* course of the Colorado River and the *westward* orientation of the Canyon deviate so strongly from the *northward* geologic structure?... There is, for example, no fault or downwarp structure directing the position of the Colorado River or the orientation of Grand Canyon." He reviewed the "antecedent-river" and the "precocious-gulley" theories, both assuming long ages of earth history, and found them unreasonable. He then proposed the "breached dam" theory which he associated with the possibility of the past breaching of two large lakes north and east of the Kaibab Uplift (which the Grand Canyon cuts through). The Lake Missoula Flood in Washington State is given as an example of what could have happened. This could be associated with a fast erosion rate of the canyon initially, with subsequent slowing to present rates. Austin, S., *Grand Canyon Monument to Catastrophe* (Santee, CA, Institute for Creation Research), 17, 85-107.

⁵⁰⁶ Hoesch stated, "Mesozoic strata are conspicuously or nearly absent for an estimated 9,000 square kilometers around Grand Canyon, though they are present to thickness in excess of 4 kilometers in the adjacent Grand Staircase and Black Mesa regions. Erosion is estimated to have removed 36,000 cubic

erosion processes, but infers a process of watery erosion of much greater magnitude in the past than seen today. This example represents only one area, and there is similar evidence from over the entire continental crust.

4. Fossil Trees and Vegetation:

Fossil plant life is found on every continent of the earth, and in different stratigraphic formations. Characteristics of these fossils are seen which are consistent with massive catastrophic watery deposition.⁵⁰⁷

For Example:

- a) Some fossils are very large tree trunks and may extend 130 feet and be 10 feet in diameter (**Figure 23a**).⁵⁰⁸
- b) They have little or no branches or bark (**Figure 23b**).⁵⁰⁹
- c) Petrified wood ring patterns are consistent with rapid deposition of healthy trees and not rotting ones—although there may be some as there are a few hollow (now with crystal formation within) trunks. There are ring patterns that show compression, ovoid in shape, indicating that significant pressure was applied before the tree petrified (**Figure 23c**).⁵¹⁰
- d) Trees in the Petrified Forest National Park show preferred horizontal root bulb

kilometers, dwarfing the approximately 4,000 cubic kilometers excavated from Grand Canyon." W.A Hoesch, "Red Butte: Remnant Of The Flood," *Institute For Creation Research*, www.icr.org/article/3755/ (accessed 6/6/10).

⁵⁰⁷ Ash stated, "Typically, the trunks are battered and worn, without bark, limbs, or roots, but stumps of small limbs and roots are present on some of them. The condition of the logs indicates that most were carried some distance by streams before being buried and fossilized." S.R Ash, *Petrified Forest: A Story In Stone* (Petrified Forest, AZ: Petrified Forest Museum Association, 2005), 17. However, it can be contested whether just streams were involved as petrified wood is found throughout the thousands of square miles of the Chinle Formation and other Triassic strata.

⁵⁰⁸ Ibid, 17. Ash stated, "On average, the logs are about 80-100 feet long and 3 to 4 feet in diameter, but some range up to about 130 feet in length and 10 feet in diameter at the base." Movement of these size trunks would require massive water movement.

⁵⁰⁹ Ibid., 17; and documentation by the author of this dissertation.

⁵¹⁰ S.R. Ash (2005), description on page 9, with photograph on page 10.

orientation in any given layer consistent with deposition by flowing water and orientation to that flow (**Figure 23d**).^{511, 512}

e) The site of the branch insert into the trunk often shows evidence of being torn off- leaving the “eye” and a jagged stubby center (**Figure 23e**).⁵¹³

f) Matted roots or limbs are rarely found within the same strata as the tree trunks, indicating that they were probably torn off and sedimented according to their flotation characteristics (**Figure 23f**).^{514, 515, 516}

Austin identified upright deposition of washed in tree trunks from Mt Saint Helens. (**Figure 24a**) This profile is similar to that which Morris has identified as evidence

⁵¹¹ Chadwick and Brand measured the orientation of 739 trees at 8 different locations in the northeast corner of Arizona and southeast corner of Utah within the Chinle Formation. They noted a generally consistent orientation at a given site, although sites varied in the amount of scatter. However, there was often significant difference of orientation between different sites. They noted the stratigraphic layer that trees were located in- i.e. Upper or Lower Chinle. A.V. Chadwick and L.R. Brand, "Fossil Tree Orientation in the Chinle Formation," (*Origins* 1(1), 1974), 22-28. <http://www/grisda.org/orgins/01022.htm>.

⁵¹² Personal observations of this author. It was observed that depending on what sedimentary layer the petrified log was in: above, within, or below the Sonsela Sandstone Layer (the major sandstone layer in the Chinle formation which roughly divides it into upper and lower layers), the orientation differed; within the PNFP. Thus there was the appearance of water flow in alternating directions.

⁵¹³ S.R. Ash, "*Arboramosa Semicicumtrachea*, An Unusual Late Triassic Tree In Petrified Forest National Park, Arizona," in *A Century of Research at Petrified Forest National Park 1906-2006*, ed. W.G. Parkes, S.R. Ash and R.B. Irmis (Flagstaff, AZ: Museum of Northern Arizona, 2006), Figure #1 and page 69.

⁵¹⁴ Personal observations of this author. It appears that the roots, bark, and leaves may have matted together during aggregation in water in sediments before being deposited. These layers tend to be in the Lower Chinle and are distinctly separate from the tree trunks. These layers appear to be about 3 inches to 1-2 feet thick.

⁵¹⁵ On page 18 Ash commented that it is rare to find bark on the *Araucarioxylon arizonicum*, and the seeds and leaves are unknown. Yet the trunks of these trees are found throughout the Upper and Lower Chinle. Most plant material (mostly fern leaves) is found in the Lower Chinle, with a scattering in the Upper Chinle per Ash. It is clear from his comments and this author's observations (Leslie) that leafy material, seeds, and bark were generally deposited separately from the large tree trunks. See Ash in the chapter Petrified Forest S.R. Ash, *Investigations in the Chinle Formation* (Museum of Northern Arizona: Flagstaff, AZ, 1972), 23.

⁵¹⁶ Ash in *Petrified Forest* (2005) commented on pages 17 and 19 that both the tree trunks and other parts of plants have the appearance of having been washed downstream and then deposited. This is consistent with catastrophic deposition.

for the washing in of tree bases from Yellowstone Park (**Figure 24b**).⁵¹⁷ These results are similar to those of Buckland from 1836.⁵¹⁸ The root bulbs rarely show any extension of the root system—although it is understood that this may be difficult to preserve. Yet in many tree trunks standing upright most appear simply deposited in sediments or settled into that position without significant root systems, and in soil that does not really have characteristics of a paleosol.⁵¹⁹ In Colorado there are *Calamities* trunks that are coalesced together in an upright position in a sandy strata.⁵²⁰

5. Other Fossils:

Almost all, if not all, life forms that have been preserved as fossils in sedimentary rocks show evidence of catastrophic burial.

- a) Most show deposition in “death assemblages”, where many of the organisms are found crushed (deformed, yet whole) together (**Figure 25a-f; 26**). In New Mexico a concentrated group of Metoposaurus were found crushed together.⁵²¹

⁵¹⁷ J.D. Morris, *The Young Earth* (Colorado Springs, CO: Creation-Life Publishers, Inc, 1994), 114.

⁵¹⁸ Buckland, W., *The Bridgewater Treatises on the Power, Wisdom, and Goodness of God as Manifested in the Creation*, Treatise VI, *Geology and Mineralogy Considered with reference to Natural Theology* (Philadelphia, PA: Carey, Lea and Blanchard, 1837), plate 57.

⁵¹⁹ Chadwick and Brand in this article stated, “We partially excavated two of these trees to the apparent root level. There was no stratigraphic break associated with the base of these trees which could be interpreted as ‘soil’. This suggests that they may be of allochthonous origin (transported to the site of deposition), rather than in position of growth.” A.V. Chadwick and L.R. Brand, "Fossil Tree Orientation in the Chinle Formation," *Geoscience Research Institute* (1974), <http://www.grisda.org/origins/01022.html>.

⁵²⁰ Holt referenced in W.R. Corliss (1980) *Unknown Earth: A Handbook of Geological Enigmas*. The Scourcebook Project, Glem Arm, MD pg. 464-466. E.L. Holt "Upright Trunks of Neocalamites from the Upper Triassic---," *J. Geology* 55 (1947): 511-513.

⁵²¹ The authors note that the assemblage was probably transported and deposited under hydrologic (watery) conditions. K. E. Zeigler, L.G. Spencer and A.B Heckert, "Taphonomy of the Late Triassic Lamy Amphibian Quarry (Garita Creek Formation:Chinle Group), Central New Mexico," in *Upper Triassic Stratigraphy and Paleontology* *New Mexico Museum of Natural History and Science Bulletin No. 21*, ed. A.B. Heckert and S.G. Lucas (Albuquerque, NM: New Mexico Museum of Natural History and Science, 2002), 279-283.

- b) Often they are found in large numbers. In Montana up to 10,000 reptiles were found together in a mass aggregate. The authors surmise that they were killed by volcanic ash and gas and then subsequently buried by a massive (regional) flood.⁵²²
- c) Many death assemblages contain organisms that would not normally be found together in the same ecologic habitat, or even the same time period.^{523, 524}
- d) Fossils tend to be deposited, sequentially, with lower strata containing more aquatic ones, land dwelling in higher strata, and even birds in some of the higher strata. Yet, marine fossils are found throughout the geologic column.^{525, 526} This

⁵²² Horner explained the death of a large number of dinosaurs as being killed by a volcanic ash and gas flow, then after a period of time buried by a massive flood. He hypothesized a period of time between the two events because of the appearance of some erosion of bones (proposed to be done by acidic volcanic ash) and also the way the bones broke. However, fossilization can be a very rapid process, and the clayey strata that these and other fossils are found in can expand and contract significantly with heat, cold, and moisture- and thus give much the same appearance without a significant time gap between death and burial. See section on the process of fossilization in the section on Generalizability. J.R. Horner, *Digging Dinosaurs* (New York: Workman Publishing, 1988), 128.

⁵²³ Page 55 the author discussed the fossil discoveries of one of the early US fossil hunters and stated (of Sternberg), “He found a fossil swan, flamingo, heron, six genera of fish, and fifteen species of fossil mammals, including llamas, horses, elephant, dog, otter, beaver, and a great sloth.” It was stated that they were all found in a clay bed lake bed. But these animals are from several different habits, and several are not found presently in North America, but are still found on other continents. And it is clear that they were catastrophically deposited together. K. Rogers, *The Sternberg Fossil Hunters: A Dinosaur Mystery* (Missoula, MT: Mountain Press Publishing Co, 1991), 55.

⁵²⁴ Dr. A. A. Snelling gives several examples of the mixing of animals from different habitats deposited within a given strata. He lists Montceau-les-Mines, France; Florissant, Colorado; Green River Shale, Wyoming; Fossil Bluff, Wynyard, Tasmania; and chalk beds in the U.S.A., United Kingdom, Europe, and Australia. He stated regarding Fossil Bluff, “thousands of marine creatures (corals, bryozoans, mollusks) buried with a toothed whale and marsupial possum” which clearly reflected the burial of land, shallow water, and deep sea aquatic animals together- which were not part of the same ecologic environment, but yet were buried together, consistent with a large watery catastrophe. A. Snelling, *Rocks, Strata, Fossils and the Flood* (Florence, KY: Answers in Genesis, 2007), DVD format.

⁵²⁵ Dr. Snelling pointed out that the composition of ocean basins today is that of a thin sedimentary veneer on top of basalt. The continental crust contains the thick strata sequences containing marine and land organisms. (This probably reflects the properties of life form preservation as fossils when massive muddy floods rapidly buried the life forms. This is in contrast to the lack of conditions for fossilization in the current oceans.) The continental crust is more buoyant than the crust of the ocean floors. *The Flood: The Big Picture of Its Mechanism and Resulting Evidences*, DVDA.A Snelling, (AIG, 2009).

⁵²⁶ Fossils from the Phylum Mollusca are found from the "lower Cambrian to recent" ... "In addition to the gastropods and bivalves- the best known of the Mollusks- the phylum also includes the cephalopods: living squids, nautilus, cuttlefish, and octopods, as well as ammonoids, which are known

has been known for almost two centuries (**Figure 27**).⁵²⁷ But there are also significant overlaps of fossils of many groups among strata,⁵²⁸ and it now appears that all major phyla are present from the lowest strata that contain multitudes of megascopic fossils (Cambrian). Dr. Paul Chien has commented that there were more phyla in the Cambrian strata than now, and that instead of an expanding tree of life, or upside down pyramid (▼), there is an upright pyramid (▲) of the destruction of life—regarding the diversity.⁵²⁹ This has been

exclusively as fossils."..."most classes are still strictly marine," *The Audubon Society Field Guide to North America Fossils* (New York: A.A. Knopf, 1987), 389. Thus, these fossil remains are consistent with large masses of water having drowned most of all air-breathing and aquatic life forms, and burying them in the strata of the continental crust at a given point in past history.

⁵²⁷ L. Agassiz, *Principles of Zoology* (Boston: Gould and Lincoln, 1866), frontise piece shows representatives of most of the current major life groups, including the mollusca, present in the Cambrian Period.

⁵²⁸ This author stated, "Calculations performed on the stratigraphic separational tendencies of fossil families show that one-third of them span 3 or more geologic periods." J. Woodmorappe, "A Diluviological Treatise on the Stratigraphic Separation of Fossils," in *Studies in Flood Geology*, (self publication, 1993). First published in the Creation Research Society Quarterly Vol. 20, December 1983, 133-185. ICR has published it as well.

⁵²⁹ In an interview in 2002 with Dr. P. Chien, chairman of the biology department at the University of San Francisco, he was asked the question "Did you find it [the Cambrian fossil record at Chengjiang China] really was an 'explosion of life'?" He responded, "Yes. A simple way of putting it is that currently we have about 38 phyla of different groups of animals, but the total number of phyla discovered during that period of time (including those in China, Canada, and elsewhere) adds up to over 50 phyla. That means [there are] more phyla in the very, very beginning, where we found the first fossils [of animal life], than exist now." Dr. Chien talked about an inverted pyramid for the diversity of animals, instead of a upright branching tree. From the "Origins" website. Online at: origins.org/articles/chien_explosionoflife.html.

It is interesting to note that Darwin in *The Origin of Species* stated in chapter 10, "The abrupt manner in which whole groups of species suddenly appear in certain formations, has been urged by several palaeontologists—for instance, by Agassiz, Pictet, and Sedgwick—as a fatal objection to the belief in the transmutation of species. If numerous species, belonging to the same genera or families, have really started into life at once, the fact would be fatal to the theory of evolution through natural selection." Then he said, "But we continually overrate the perfection of the geological record, and falsely infer, because certain genera of families have not been found beneath a certain stage, that they did not exist before that stage." From: World's Famous Books, Merrill and Baker, N.Y. and London. (reprint early 1900's).

The lack of a fossil record for the Cambrian Period is no longer considered valid. See "The Scientific Controversy Over the Cambrian Explosion." Discovery Institute, Online: discovery.org. In this article Dr. J.W. Valentine et al. is quoted as saying, "The metazoan explosion is real; it is too big to be masked by flaws in the fossil record." His quote is referenced as being from: "The Biological Explosion at the Precambrian-Cambrian Boundary", *Evolutionary Biology* 25(1991): 279-356.

called the “Cambrian Explosion”.⁵³⁰ Dr. Kurt Wise commented in an article entitled, “Fossil Mysteries That Evolution Can’t Explain”, on page 42, “Besides trilobites and brachiopods, they [researchers] found echinoderms and even vertebrates. In fact, they found fossils of all the animal ‘crown groups’—those groups most different from each other and thus from the most distant parts (or ‘crown’) of the animal ‘family tree’.”⁵³¹ These data can be put within the framework of a watery massive catastrophic burial.

- e) Soft as well as hard bodied fossil organisms are found.⁵³² The preservation of soft bodied organisms and of their intricate parts strongly supports rapid burial soon after death or the burial of live organisms (**Figure 28a-h**). There often appears to have been no time for the decay process to occur. As well, fine tracks

⁵³⁰ The authors of this article reference 4 characteristics of the Cambrian Explosion; 1) It appeared suddenly within a very short period of time [using long age of the earth parameters] around 542 mya and lasted 5 mya. "Yet almost all the major innovations in the basic architecture of living forms occurred within just such a small fraction of the earth's history during the Cambrian." 2) "The Cambrian explosion exhibits an extraordinary morphological breadth, and completeness at the phyletic level. Cambrian rocks display at least two-thirds of the basic body plans or architectural designs of the animal kingdom. Representatives of twenty-eight of the forty-two known animal phyla definitely appear by the close of the Cambrian." 3) "The major body plans that arise in the Cambrian period exhibit considerable morphological isolation from one another (or 'disparity') and then subsequent stasis." 4) "The sudden emergence of the various animals of the Cambrian explosion represents a dramatic discontinuous or 'quantum' increase in the information content (or specified complexity) of the biological world." S.C. Meyer, P.A. Nelson, and P. Chien, "The Cambrian Explosion: Biology's Big Bang," *Discovery Institute*, 2001, 1-50, Discovery.org/articleFiles/PDFs/Cambrian.pdf. (Accessed online Jan.21, 2010).

⁵³¹ Dr. Wise was addressing the issue of whether there had been a long progression of evolutionary development of life. One of his arguments against this theme was in regards to the observations of the fossil record in the Cambrian strata. He made several other comments: 1) the Precambrian fossils do not contain life forms that can be precursors (ancestors) to those associated with the Cambrian; 2) in the Cambrian, as noted in the text, there is the "sudden appearance" of representatives of all of the major phylum with no evidence of ancestors; 3) with such an "explosion" of life in this presumed early period of earth history, there are not enough species represented in the rocks or now; and 4) current radiometric dating has shortened the length of the Cambrian fossil explosion to less than 10 million years- too short a period of time to explain its diversity of fossil forms. He then says, "Since evolution can't explain the Cambrian Explosion, what can? Burying sea creatures on a worldwide scale could be the work of a global flood. This would also explain why we see animals from most of the crown groups but relatively few species... If the Flood buried only one environment at a time, then each layer in the fossil record reflects the mix of crown groups and species from one environment." Kurt Wise, "Fossil Mysteries That Evolution Can't Explain," *Answers* 5:1 (Jan.-Mar 2010): 42.

⁵³² In this article Butterfield explained some of the current thinking on the processes of fossilization, and in particular at the China sites. Soft body forms are particularly well preserved at the Chengjiang China site. (See figures in text for other non-China examples). N. J. Butterfield, *Exceptional Fossil Preservation and the Cambrian Explosion* (Oxford, ENG: Oxford Journal, 2003), 166-177.

of birds, insects, large or small reptiles, and mammals have been found laid down on muddy or wet surfaces which then had to be rapidly preserved (**Figure 29a-g**), and it is has been observed that tracks are often found in strata well below that of fossils of the expected life form making them.⁵³³ It also supports the concept that the fossil record is an accurate representation of the life forms that have lived on the earth.⁵³⁴ Many tetrapod fossil tracks seen in the Coconino Sandstone are consistent with experimentally observed amphibian ones produced underwater and moving up slopes tangential to the current (**Figure 29e**).⁵³⁵ Dinosaur footprints have been preserved in both sandy sediments and coal layers (**Figure 30 a-d**).

- f) This evidence, as well, supports the deposition of sandy sediments under watery conditions, and is supportive of the likelihood of reptiles fleeing from these waters over a wide spread area and during deposition of multiple layers of the sandy sediments.

5. The Fossilization Process

- a) There are several different processes of fossilization. Many have been shown to occur very rapidly. It has been demonstrated in the laboratory that the processes

⁵³³ Snelling, 2009, volume one, 451 figure 24a,b.

⁵³⁴ K. Wise, "Completeness of the Fossil Record," *Answers Magazine* 5:1 (Jan.-Mar.2010 2010):69-70.

⁵³⁵ Brand stated, "The laboratory trackways most similar to the fossil tracks were those made underwater. Underwater trackways had toe marks as often as the fossil tracks and were uniform in appearance the full length of the sand slope, as the fossil tracks are.... The sole impressions in the underwater tracks tend to be short in comparison to their width. The animals are partially buoyed up by water, and they often push against the sand with their feet almost at right angles to the surface, rather than placing their feet flat on the surface....The trackways that were headed across the slope but with toes pointed upslope can perhaps be best explained by animals being pushed by a water current moving at an angle to the direction of their movement." He concluded that "The data presented in this paper suggest that fossil footprints of the type found in the Coconino Sandstone should not be used as evidence for eolian deposition of dry sand." He noted that footprints were collected over the lower third of the Coconino Sandstone. L. Brand, "Field and Laboratory Studies on the Coconino Sandstone (Permian) Vertebrates Footprints and Their Paleoeological Implications," *Palaeogeography, Palaeoclimatology, Palaeoecology*, 28 (1979):25-38.

of coal formation can occur within weeks to months.⁵³⁶ Wood can have evidence of becoming silicified within months to years under natural conditions

(**Figure 31**).^{537, 538, 539, 540} There is even a synthetic process by which it can be rapidly hardened within days.⁵⁴¹ The process of pyritization of plant material can develop within 12 weeks.⁵⁴² Opalization can be done synthetically within months.⁵⁴³

b) There are many examples of un-fossilized protein, DNA, and perishable

⁵³⁶ Heat, pressure, and a clayey compound that encased the plant material appeared to have been necessary. A. A. Snelling and J. Mackay, "Coal, Volcanism, and Noah's Flood," *Ex Nihilo Technical Journal* 1(1) (1984), 11-29, <http://www.answersingenesi.org/tj/il/noah.asp?vPrint=1>.

⁵³⁷ A. Histada, F. Takeshi, M. Hiroshi, G. Michiharu, O. Toshitaka, and Y. Shigeru (1999). Experimental Study on Wood Silification in the Stream of Hot Spring Water. Estimation of Rapidity of the Mechanism of Silification. *J. of the Geological Society of Japan*. Vol.105(2):108-115. Online summary at sciencelinks.jp/j-east/article/199911.

⁵³⁸ H. Akahane, T. Furuno, H. Miyajima, T. Yoshikawa, and S. Yamamoto, "Rapid wood silicification in hot spring water: An example of silicification of wood during the earth's history," *Sedimentary Geology* 169 (2004):219-228.

⁵³⁹ Generally, the process involves the molecule by molecule replacement of the cell material in plants by silica and other minerals. Animal flesh tends not to fossil as well, except the bony matrix. Permineralization results from the partial replacement of the plant structure by silica- carbon can still be detected. With agatization complete replacement has occurred.

⁵⁴⁰ Dr. Snelling reviewed the experiments of A. Akahane et al. (1999). It was noted that by placing fresh alder wood in the hot spring for varying amounts of time increasing degrees of silicification occurred. After 4 years about 12% of the woody tissue had been silicified and by 7 years 35%. A.A Snelling, "Rapid Petrification of wood: an unexpected confirmation of creationist research," *Impact*, no. 379 (2005): i-iv.

⁵⁴¹ A. A. Snelling, "'Instant' Petrified Wood," *Creation Ex Nihilo* 17(4) (1995), 38-40, http://www.answersingenesi.org/home/area/magazines/doc/den_vln4_wood.asp?vPrint=1

⁵⁴² The experiments included adding sulphate-reducing bacteria to the mixture. F. Brock, D.E.G. Briggs and R.J.Parkes, "Plant Pyritization: Microbial Experiments," in *The 10th Plant Taphonomy Meeting, School of Earth Sciences, University of Leeds* (Leeds, UK, 1999), <http://www.earth.leeds.ac.uk/~hunt/abtractshtml>.

⁵⁴³ Dr. Snelling stated "All it takes is an electrolyte (a chemical solution that conducts electricity), a source of silica and water, and some alumina and feldspar. The basic ingredient in Len's 'recipe' is a chemical called tetraethylsilicate (TEOS for short), which is an organic molecule containing silica. The amount of alumina which turns to aluminum oxide determines the hardness of the opal." He goes on to state that they have the appearance of natural opal even under the electron microscope. There are many examples of opalized fossil remains of organisms including bones, seashells, seed pods, and tree branches. A.A. Snelling, "Creating Opals," *Creation Ex Nihilo* 17(1) (1994), 14-17, <http://www.answersingenesi.org/creation/v17i1/opals.asp?vPrint=1>.

pigments found in animal and plant remains that should be fully petrified, i.e. without protein or DNA preservation, given their calculated or the assumed age of burial.^{544,545,546,547}

6. Radiometric Dating:

a) C 14 obtained from diamonds is thought to argue for a young age of the earth, as diamonds are considered primordial. With the half life of C¹⁴ being 5,730 years, it should be completely un-measurable, even by sensitive techniques, by 15 half lives, or less than 95,000 years. Yet it can still be measured within

⁵⁴⁴ Thomas listed a hadrosaur whose whole body was found intact. Previous discoveries had found blood vessels and blood cells within *T. rex* and hadrosaur bones. He stated that experimental studies have shown that collagen should deteriorate within 30,000 years and DNA by 10,000 years (of course the results of both of these calculations must be extrapolated—and actual rates of deterioration may be much faster). Both products have been found in animals or plants that have been estimated to be millions of years old by other age calculations. He and others have argued that this supports the concept that the burial of these life forms was rapid (before putrification) and thus of much more recent origin. B. Thomas, "Fossilized Biomaterials Must Be Young," *Acts and Facts* (June 2009): 17.

⁵⁴⁵ In this article it was noted that Leroy Hood, a pioneer in sequencing proteins from fossil life forms, had determined that the protein structure and amino acid composition "were still discernable in the three-inch *Scabrotrigonia thoracia* [assumed to be 80 million years old], once prevalent in warmer oceans around the world but now found only in the waters off Australia. Parts of the clam's protein were so similar to its contemporary, Dr. Leroy Hood disclosed Sunday, there was no sign of evolutionary change. Scientists said that the shell and protein were so well preserved because the fossil was surrounded by sand containing just enough clay to keep fresh water from contaminating its molecules." In: "Clam Fossil Uncovered," *The Nashua Telegraph*, October 10 1976. Thus protein began to be isolated from fossil material, in the 1960-1970's, assumed by some to be very ancient, and which was clearly unexpected. Mechanisms like preservation in a clayey/sand compound began to be proposed.

⁵⁴⁶ In this article the authors sequenced 1528 bp of *Magnolia latahensis* from the Clarkia fossil beds of Idaho (estimated by some to be 17-20 million years old). They commented that "The *ndhf* sequence from *M. latahensis*[fossil] was identical to those of extant[modern] *M. grandiflora*, *M. schiediana*, *M. guatemalensis*, and *M. tanaulipana*." As well, "This result is reasonable considering, that: 1) the morphology of *M. latahensis* is very similar to that of extant *M. grandiflora*...." D.E. Soltis Kim S., P.S. Soltis, and Y. Suh, "DNA Sequence from Miocene Fossils: An *NDHF* Sequence of *Magnolia latahensis* (Magnoliaceae) and an RBCL Sequence of *Persea pseudocarolinensis* (Lauraceae)," *American Journal of Botany*, 91(4), 2004. Thus DNA sequencing was possible on samples obtained from plant material assumed to be 17-20 million years old.

⁵⁴⁷ This author, JGL, worked with Dr. L. B. Sandberg, on the structure and metabolism of elastin in the 1970's. The soluble precursor, tropoelastin, was extremely labile to enzymatic destruction as soon as the aortic tissue it was found in was mechanically broken down. Rapid icing down with enzyme inhibitors was necessary to preserve it. It is well known that DNA is even more fragile. Thus the identification of protein and DNA that is able to be sequenced in fossil life forms is highly unlikely, and the longer the age of deposition the less likely it should be possible.

diamonds.⁵⁴⁸

- b) Studies have shown similar amounts of C¹⁴ in fossils from deep and shallow strata (Table 1).⁵⁴⁹

These data are consistent with the rapid and sequential deposition of sedimentary strata- which one would expect in the setting of a worldwide flood condition.

C. Biology

1. Mitochondrial DNA:

With the recent advent of DNA sequencing a massive amount of effort has been expended to sequence DNA that belongs to humans and other living organisms. Virtually the entire human genome has been sequenced using various overlapping sequence technology.⁵⁵⁰ As well, mitochondrial DNA from humans has been routinely sequenced.⁵⁵¹ Recent sequencing of the mitochondrial DNA of humans has revealed several important pieces of information.

- a) There is a lack of diversity of the DNA sequence in mtDNA among the various human groups. 83% of the sequences are invariant, and of the others in over 99% of those variable areas there is at least 90% homogeneity. Only 0.22% of the sequences are called “ambiguous”. From this a “consensus Eve” mtDNA has been calculated to be only 21.6 nucleotides different, out of

⁵⁴⁸ J. R. Baumgardner, C14 Evidence for a Recent Global Flood and a Young Earth," in *Radioisotopes and the Age of the Earth*, ed. R.L. Ivey (Institute for Creation Research, El Cajon ,CA and Creation Research Society, Chino Valley, AZ, 2005), 587-630.

⁵⁴⁹ Ibid J. R. Baumgardner, C¹⁴ Evidence for a Recent Global Flood (2005).

⁵⁵⁰ This was simply an overview article. "The International Human Genome Mapping Consortium: A Physical Map of the Human Genome," *Nature* 409 (2001): 934-941.

⁵⁵¹ R.W. Taylor, Taylor, G.A., Durham, S.E., and Turnbull, D.M, "The Determination of Complete Human Mitochondrial DNA in Single Cells: Implications for the Study of Somatic Mitochondrial DNA Point Mutations," *Nucleic Acids Res* 29, E74 (2001). This article was cited in Behar, D.M. “The Dawn of Human Matrilineal Diversity,” *The American Journal of Human Genetics* 82,1130-1140.

16,569 from the current population's mtDNA.⁵⁵² Thus, even among widely separated human populations the mitochondrial DNA is highly homogeneous-far more than expected by some researchers.

- b) This sort of homogeneity has been seen in some animal groups such as chimpanzees⁵⁵³, and dogs.⁵⁵⁴ Thus, it would support the concept that animal groups (probably most if not all) have come from small breeding stocks.
- c) Mutation rates from mother to daughter are much higher (10-20 fold) than those that have been estimated if comparing human and chimpanzee mtDNA sequences by assuming a common ancestor.⁵⁵⁵ This compresses the length of man's (and woman's) presence on the earth if the observed mutational rate is

⁵⁵² R.W. Carter, D. Criswell, and J. Sandford, "The "Eve" Mitochondrial Consensus Sequence," in *Proceedings of the Sixth International Conference on Creationism held in Pittsburg, PA, August 3-7*, ed. A.A. Snelling (Creation Research Fellowship, Pittsburg, PA and Institute for Creation Research, Dallas, TX, 2008), 111-116.

⁵⁵³ Genetic bottlenecks are reviewed in this popular press article; but it does not refer to the assumptions made on the projection of current mutation rates into the past, times of supposed divergence of supposed related animal groups, usually based on certain assumed fossil dating, and the assumption that two different organisms are genetically related- even though it has not been proven empirically so. These are all questionable assumptions in the field of science. Yet there is a homogeneity of DNA within given animal groups, which supports the recent expansive population of that group from a small group. (BookRags.com), "Population Bottleneck.", <http://www.bookrags.com/printfriendly/?p=gale&u=population-bottleneck-gen-03>.

⁵⁵⁴ F. Sherwin, "The Dogma of Evolution," Institute for Creation Research, El Cajon, CA, *Impact* 200402 (2002). He cited V. Morell, "The Origin of Dogs," *Science*, June 13, 1997.

⁵⁵⁵ In this article the author states that to be able to estimate the age of the most recent female ancestor a molecular clock must be set up. The one he uses and that virtually all others use is that of the chimpanzee mtDNA with the assumed divergence from humans of 5-9 million years ago. This is an unproven assumption. Later in the same article he comments on the observed mutation rates from a mother to daughter. He says, "Finally, direct estimates of mtDNA mutation rates, in which mtDNA sequences were compared in mothers and their offspring, have indicated that the rate may be 10 to 20 times higher than estimates based on phylogenetic [i.e. chimpanzee] studies. This mutation rate could yield a coalescence time of only 10,000 years. However, it is likely that most of these mutations do not persist for more than a few generations, because they are lost through the bottlenecks that occur as mitochondrial molecules are replicated each generation." Jorde, L.B., M. Bamshad, and A. Rogers, *BioEssays, Using Mitochondrial and Nuclear DNA Markers to Reconstruct Human Evolution* (San Francisco: John Wiley and Sons, 1998), 126-136.

used rather than the assumed rate. As well, there actually are substantial DNA sequence differences between the two life groups.^{556,557}

- d) Comparison of mtDNA from various ethnic and racial groups has been used to support the “Out of Africa Eve”⁵⁵⁸ and yet another scenario can be constructed to support “Eve” coming from the Fertile Crescent area with an isolated branch developing in Africa (**Figure 1**).⁵⁵⁹

⁵⁵⁶ DeWitt stated, " studies that have used pedigrees or generational mtDNA comparison have yielded a much more recent MRCA- even 6,500 years." intrinsic sequence differences from the beginning of Creation." D. DeWitt, "Greater than 98% Chimp/Human DNA? Not Anymore," *Ex Nihilo Technical Journal* 17(1) (2003), 8-10.

⁵⁵⁷ He went on to state, " the difference between humans and chimpanzees include ~ 35 million DNA bases that are different, ~ 45 million in the human that are absent from the chimp and ~ 45 million in the chimp that are absent from the human." This is about 4% (125 million out of 3 billion nucleotides). But he further commented, " 40 million separate mutation events would have to take place and become fixed in the population in only 300,000 generations—a problem referred to as ' Haldane's dilemma'. This problem is exacerbated because the authors acknowledge that most evolutionary change is due to neutral and random genetic drift. That refers to change in which natural selection is not operating. Without a selective advantage, it is difficult to explain how this huge number of mutations could become fixed in the population. Instead, many of these may actually be intrinsic sequence differences from the beginning of Creation." D.A DeWitt, "Chimp genome sequence very different from man," *Answers in Genesis*, September 5 2005, <http://www.answersingenesis.org/docs2005/0905chimp.asp?vPrint=1>.

⁵⁵⁸ These researchers apply "bottlenecking" to explain the surprising, to many, homogeneous sequencing of the human mtDNA. They even comment that though the chimpanzee population size is smaller than humans their DNA is more heterogeneous. Their report also noted that the mtDNA of Africans is more heterogeneous than those of the Asian and European groups. From this they surmise that it, the African population, is the more ancient. But as Carter et. al. (2008) have calculated this could simply be due to early migration and isolation of the African group. Jorde et. al. recognized that " natural selection for a specific mtDNA variant would exert exactly the same effect as a demographic population expansion: the frequency of one mtDNA type could have increased because of selection and may now be present in nearly all humans. Natural selection is unlikely to affect other genetic systems in the same way, so the demographic expansion argument would be reinforced by similar patterns in other types of genetic systems. Indeed, such evidence now exists for Y chromosome microsatellites single polymorphisms (SNP's) and for autosomal microsatellites." page 2200. They go on to comment that "populations do cluster by continent. In addition, the variation between populations within continents is substantially less than the variation between continental populations." page 2200. One explanation they give for the relatively more homogenous sequences between Asia and Europe as compared to Africa is, "smaller European- Asian genetic distances could also be produced by greater flow between these two continents." page 2201. They thus acknowledge demographic impact on genetic sequences, but still adhere to the "out of Africa" scenario. Yet, demographic isolation exerts powerful genetic pressure. On page 2002 they argue against "multi-regional" development of humans based partly on, "studies of haplotype variation show that haplotypes found outside Africa are usually subsets of the larger collection of haplotypes found within Africa." page 2200. L.B. Jorde, W.S. Watkins and M.J. Bamshad, "Population Genomics: A Bridge from Evolutionary History to Genetic Medicine," *Human Molecular Genetics* 10(20) (2001): 2199-2207.

⁵⁵⁹ R.W. Carter, D. Criswell and J. Sanford, "The 'Eve' Mitochondrial Consensus Sequence" (2008).

e) Recent DNA study using less fragmented sequences have also show the uniqueness of the human genome. At one time some researchers propounded a 98% similarity between human and chimpanzee DNA using small fragments of chimpanzee DNA and comparing the fragments with the human genome structure. In a recent study the chimpanzee DNA was mapped on its own chromosome and then this was compared to the human one (the Y chromosome was used). The comparison of genes matched only 53% of the time, and the “human Y chromosome contains a third more gene categories—entirely different classes of genes—compared to chimps.”⁵⁶⁰

From the above observations it is now recognized within current research that the human population, as presently composed, developed from a small group and over a very short period of time, and probably originated in the Mesopotamian area and then spread throughout the earth.^{561,562,563} Some animal studies as well seem to confirm this, e.g. the development of a large group of organisms from a small initial number of progenitors.⁵⁶⁴

⁵⁶⁰ The authors noted that the initial studies were presented with limited data, and a bias towards the evolutionary paradigm in that the chimp DNA fragments were matched against the Human chromosome rather than the Chimpanzee. J. Tomkins and B. Thomas, "New Chromosome Research Undermines Human-Chimp Similarity Claims," *Acts and Facts* (April 2010): 4-5.

⁵⁶¹ S. Caesar, "The Human: A Young Species?," *Associates for Biblical Research* (2008), <http://www.biblicalarcheology.org/post/2008/11/The-Human-Race-A-Young-Species.aspx>.

⁵⁶² He commented, “studies that have used pedigrees or generational mtDNA comparisons have yielded a much more recent MRCA- even 6,500 years.” D. Dewitt, "Greater than 98% Chimp/human DNA similarity? Not Any More," *Ex Nihilo Technical Journal* 17(1) (2003): 8-10.

⁵⁶³ L.B. Jorde et. al. (2001), 2199. Though these authors are evolutionists and accept longer ages for the presence of mankind; they also recognize that the human genome reflects humans developing from a small group and rapidly expanding. They said on pg. 2199, “ Thus, one explanation for our relatively small effective size is that the human population was far smaller at some time in the past and then increased rapidly in size.”

⁵⁶⁴ F. Sherwin, *The Dogma of Evolution*, *Impact* (2002).

2. Breeding:

Animals breed within “kinds”. The concept of a “kind” has been widely debated. Linnaeus, in the 1700’s, was one of the first to develop comprehensive groupings of animals (**Figure 2a**).⁵⁶⁵ Cuvier expanded this in his *The Animal Kingdom* (**Figure 2b**).⁵⁶⁶ Interbreeding has been an important component in the classification.⁵⁶⁷ Among the initial groupings it had been shown that there could be wide variation in the appearance of the breeding members—i.e. dogs.⁵⁶⁸ However recently, using certain artificial recombinant technology, hybrids may have been bred among animal groups that would not generally interbreed, i.e. sheep-goat.⁵⁶⁹ But this occurred among groups that would be close in physical and genetic characteristics. Marsh recognized this in the 1940’s and called these polytypic species (baramins).⁵⁷⁰ The complexity of variable yet distinct groupings has been further developed by Wise and Wood^{571,572} into the field of Baraminology. In contrast to evolutionary systematics, i.e. that all living things have ultimately a common progenitor, they accept the concept that there were original animal “types” (**Figure 3**). They use both characteristics of similarity and dissimilarity to

⁵⁶⁵ Linnaeus wrote *Systema Naturae* in 1760.

⁵⁶⁶ G. Cuvier, *The Animal Kingdom*, ed. W.B Carpenter and J.O. Westwood (London: Henry Bohn, 1863).

⁵⁶⁷ F.L. Marsh, *Evolution, Creation, and Science* (Washington, D.C.: Review and Herald Publishing Association, 1947), 174.

⁵⁶⁸ W. Klotz, *Genes, Genesis, and Evolution* (Saint Louis: Concordia Publishing House, 1955), 193-195.

⁵⁶⁹ C.B. Fehilly, S.M. Willadsen, A.R. Dain and E.M. Tucker, "Cytogenetic and blood group studies of sheep/goat chimaeras," *Journal of Reproductivity Fertility* 74 (1985):215-221 .

⁵⁷⁰ F.L. Marsh, *Evolution, Creation, and Science*, (1947) 174-75.

⁵⁷¹ K.P. Wise, "Baraminology: A Young-Earth Creation Biosystematic Method," in *Proceedings of the Second International Conference on Creationism held in Pittsburgh, PA, July 30-August, 4*, ed. R.E. Walsh and C.L. Brooks (Pittsburgh: Creation Science Fellowship Inc, 1990), 345-360.

⁵⁷² These authors use both characteristics of similarity and dissimilarity to define groups or “kinds”. As well, they do not presume a common genetic origin for all life forms, but accept that God did create, initially, distinct life form groups. T.C. Wood, K.P. Wise, R. Sanders, and N. Doran, "A Refined Baramin Concept," *Occasional Papers of the Baraminology Study Group* (2003), <http://www.bryancore.org/bsg/>.

associate groups of living things into “baramins”. Reproductive interchange is not the only criteria, as some forms within the same grouping may no longer interbreed because of geographic isolation and changes in physical characteristics.⁵⁷³ As well, as mentioned above, genetic hybrids have been obtained. This field of study attempts to incorporate all these concepts in contrast to the more limited (and dogmatic) evolutionary systems (**Figure 4**).

From this it can be said that animals breed within their own groups, but with great variety, and may have bred with other similar groups in the past with which they no longer interbreed. Yet, it appears that there remain distinct separately created groupings of life forms or “kinds”.

In the Noah flood story the “kinds” of animals taken onto the ark may represent family level groups of both male and female according to Wood and others.⁵⁷⁴

3. Population Expansion Studies:

Lambert Dolphin⁵⁷⁵ has done a nice study on calculating the time required for the human population to expand from one couple. He quoted H. Morris who also did some calculations and found that after 30 generations the population would be 3.3 billion people. This was using a family size of 4 children, with a generational age of 30-35 years. Thus it would take only approximately 1000 years to reach the estimate. If the number of children is decreased to 3, then it would take 1800 years. When wars and plagues were included the effect would only blunt the growth. He used the example of the “Black Plague” around 1347. The population, in Europe, decreased from about 85 million to 60 million, but recovered to the previous

⁵⁷³ In this article Criswell discusses how great variation can occur rapidly from a small population due to geographic and ecological isolation. D. Criswell, "Speciation and the Animals on the Ark," *Acts and Facts Institute for Creation Research* (April 2009): 10-12.

⁵⁷⁴ C. Wood, "The Current Status of Baraminology," *Creation Research Quarterly* 3 (2006): 149-158.

⁵⁷⁵ "World Population Since Creation," 1987, update 7/31/07, <http://www.idolphin.org/popul.html>.

number within 200 years. He concluded with, "It is impossible to prove conclusively that the world fully populates itself in only a few thousand years. The point is, this short time scale scenario is actually more reasonable than millions of years given what we do know about population growth rates in the last millennia or two." As noted above genetic studies support these calculations.

The population expansion studies are what might be expected with the survival of a small group of people after a catastrophic event like a world- wide flood.

4. Feasibility Studies on: Carrying Animals on a Boat (like the Ark) and the Structural Requirements of a Boat (like the Ark) to Withstand Stormy Sea Weather:

The first question to address is what animals were required to be on the ark- to meet the requirements of animal life as stipulated in the story. Only those that had the 'breathe of life', and male and female of 'each kind' (See the section on Determinancy for a description of these).

It is felt by a number of creation research scientists (i.e. those that generally would accept the concept of a literal boat called the Ark) that "kind" should be equated with the level of Family in the accepted hierarchy of the animal kingdom.⁵⁷⁶

Woodmoraphe chose the genus as the required rank to go on the Ark. This would be comprised of approximately 16,000 animals varying by eight orders of magnitude in mass (from the humming bird a few grams to a sauropod approximately 80 megagrams). He assumed the juvenile state for those over 10 kg,

⁵⁷⁶ J. Woodmorappe (1996). Noah's Ark A Feasibility Study. Institute for Creation Research, Santee CA. pg.7. Woodmorappe referred to two other authors who have addressed the problem. He said, "If, as the preponderance of evidence (Jones1972b; Scherer 1993) shows, the created kind was equivalent of the family (at least in the case of mammals and birds), then there were only about 2,000 animals o the Ark (Jones 1973). In such a case it is obvious that there was no problem in housing all the animals on the commodious Ark." But he then reduces it to the taxonomic rank of the genus and calculated that the number would be 16,000 animals on the Ark. J. Woodmorappe, *Noah's Ark: A Feasibility Study* (Santee, CA: Institute for Creation Research, 1996), 7.

and figured that only 11% of animals would have been over the size of a sheep.⁵⁷⁷ Whitcomb and Morris estimated a maximum of 35,000 individual vertebrates, the average size of a sheep, on the ark.⁵⁷⁸ As well, they noted the story does not require the inclusion of the fishes, tunicates, echinoderms, mollusks, coelenterates, sponges, or the protozoans. Some mammals may not have been included—as they are aquatic.⁵⁷⁹ Amphibians, arthropods—many if not all aquatic, other insects, and worms could have survived outside the ark.⁵⁸⁰ In regard to flora, they quoted W. Lammerts, a horticulturist, “I am convinced that many thousands of plants survived either as floating vegetation rafts or by chance burial near enough to the surface of the ground for asexual sprouting of new shoots.”—regarding the toxicity of salt to plants he continues, “I see no reason at all to postulate that the salt content of the ocean at the time of the flood was as high as it is now.”⁵⁸¹ In terms of feeding the animals they comment on hibernation as decreasing the requirements.⁵⁸² Woodmorappe has delved more specifically into the volumes required and special diets of some animals—but gives examples of dried meats and fruits, compressed grain cakes, compacted hay to conserve room on the Ark . If hibernation occurred then it would greatly reduce the food requirements.

⁵⁷⁷ Ibid p. 13.

⁵⁷⁸ J. Whitcomb and H. Morris, *The Genesis Flood* (Grand Rapids: Baker House, 1967), 63-70.

⁵⁷⁹ Although by having lungs, e.g. “the breathe of life”, Noah may have had to make special provision for them. I do not think the Bible clarifies this issue.

⁵⁸⁰ J. Whitcomb and H. M. Morris, *The Genesis Flood*, (1967), 68-69. They state, “This means (referring to the carrying capacity of a stock railroad car) that at least 240 animals of the size of sheep could be accommodated in a standard two-decked stock car. Tow trains hauling 73 such cars each would thus be ample to carry the 35,000 animals. We have already seen that the Ark had the carrying capacity equivalent to that of 522 stock cars of this size.”

⁵⁸¹ J. Whitcomb and H.M. Morris, *The Genesis Flood* (1967), 70.

⁵⁸² J. Whitcomb and H.M. Morris, *The Genesis Flood* (1967), 71. They quote Marston Bates, “Hibernation is generally defined as a specific physiological state in an animal in which normal functions are suspended or greatly retarded, enabling the animal to endure long periods of complete inactivity.”

Whitcomb and Morris comment on the stability of the ark given the dimensions in the Bible.⁵⁸³ A sophisticated study was published by Hong et. al. which stated “Total safety index, defined as the weighted average of three relative safety performances, showed that the Ark had superior level of safety in high winds and waves compared with the other hull forms studied. The voyage limit of the Ark, estimated on the basis of modern passenger ships, criteria, revealed that it could have navigated through waves higher than 30 metres [that is more than 90 feet!].”⁵⁸⁴

D. Anthropology/Archeology

Common flood stories throughout all the inhabited earth (Table 3; Figure 1)

1. There is consistent evidence of a Noah flood like story in the vast majority of societies. One study showed that across a wide group of cultures 95% have histories that include a global flood catastrophe; 80% or more included a favored family saved, and a rainbow is part of the story. Most tended to be oriented to the culture from which the story was obtained.^{585,586}

2. A statistical study has revealed the likelihood of the flood accounts being from a common source because of the several unique parts of the story.⁵⁸⁷

⁵⁸³ Ibid J. Whitcomb and H. M. Morris, *The Genesis Flood* (1967), 103.

⁵⁸⁴ S.W. Hong, S.S. Na, B.S. Hyun, S.Y. Hong, D.S. Gong, J.K. Kang, S.H. Suh, K.H. Lee, and Y.G. Je, "Safety Investigation of Noah's Ark in a Seaway," *Creation Ex Nihilo Technical Journal* 8(1) (1994), 26-35, http://www.worldwideflood.com/ark/safety_aig.htm.

⁵⁸⁵ J. Bergman, "Do Creation and Flood Myths Found World Wide Have a Common Origin?," in *Proceedings of the Fifth International Conference on Creationism held in Pittsburgh, PA, August 4-9*, ed. R.L. Ivey (Pittsburgh, PA: Creation Science Fellowship Inc, 1994), 517-528.

⁵⁸⁶ A. Custance, "Flood Traditions of the World," in *Symposium on Creation*, ed. D.W. Patten (Grand Rapids, MI: Baker House Publishing, 1972), 1-44.

⁵⁸⁷ J.E. Strickling, "A Statistical Analysis of Flood Legends," *CRS Quarterly Journal* 9(3) (December 1972).

3. Archeology documents confirm the antiquity and continuity for the flood account (**Figure 2**).
4. Sodom (and Gomorrah), as an ancient city destroyed by a fiery catastrophe, has probably been found. It is coupled with the Noah Flood account in the scripture (2 Peter 2:4-9), see **Figure 3**.⁵⁸⁸
5. Stories from different cultures and continents are listed below:

a.) “A Deluge Story in Sumerian” (tl. Poebel) (**Figure 4a**)⁵⁸⁹

“The...place...The people...**The flood**...the made...At that time Nintu [cried aloud] like [a woman in travel]. **The holy Ishtar lamented for her people**... Ea in his own heart counsel. Anu, Enlil, Ea and Nin-Harsag... The gods of heaven and earth inv[oked] the name of Anu (and) Enlil. At that time **Zi-u-suddu the king, the priest of... A great... he made... In humility he prostates himself, in reverence**... Daily he stands in attendance... A dream, as had not been before, comes forth... For... the gods... Zi-u-suddu standing at its side heard—At the wall on my left side stand... At the wall I will speak a word to thee. **My holy one, give attention! By our hand(?) a flood will be sent; To destroy the seed of mankind... Is the decision, the word of the assembly [of the gods] The commands of Anu (and) En[lil...Its (their) kingdom, its (their) reign... To him (them)... All the mighty windstorms together blew. The flood...raged. When for seven days, for seven nights The flood overwhelmed the land. When the storm drove out the great boat over the mighty waters. Shamash (the sun-god) came forth shedding light over the heaven and earth. Zi-u-suddu opened the [hatch] of the great boat. The light of the hero Shamash enters into the interior (?) of the great boat. Zi-**

⁵⁸⁸ S. Collins, *The Search for Sodom and Gomorrah* (Albuquerque, NM: Trinity Southwest University Press, 2003).

⁵⁸⁹ A. Clay, *A Hebrew Deluge Story In Cuneiform* (New Haven, CN: Yale University Press, 1922), 69-72.

u-suddu, the king, Prostrates himself before Shamash. The king sacrifices an ox; a sheep he slaughters (?). By the soul of heaven, by the soul of earth ye shall conjure him, That he may be...with you. Anu (and) Enlil by the soul of heaven, by the soul of earth shall ye conjure; He will be...with you. The *niggilma* of the ground rises in abundance. **Zi-u-suddu, the king, Before Anu (and) Enlil prostrates himself Like like (that of) a god he gives to him; An eternal soul like (that of) a god he creates for him. At that time Zi-u-suddu, the king, The name of the *niggilma* (he named) “Presence of the seed of mankind” In a... land, that of Dilmun, they caused him to dwell.”**

A Flood Story from Vedic India (Figure 4b)⁵⁹⁰

“There was a great Rishi, **Manu**, son of Vivasvat... (who through a great many years, gave himself up to the practice of the most fervid religious austerities...). Once a fish came to him on the banks of the Chirini, and spake: ‘Lord, I am a small fish; I dread the stronger ones, and from them you must save me. For the strong fish devour the weaker; this has been immemorially ordained as our means of subsistence. Deliver me from this flood of apprehension, and I will requite the deed.’ Hearing this, Manu, filled with compassion; took the fish in his hand, and threw him into a jar bright as a moonbeam. In it the fish, being excellently well tended, grew; for Manu treated him like a son. After a long time, he became very large and could not be contained in the jar. Then, seeing Manu, he said again: In order that I may thrive, remove me elsewhere. Manu then took him out of the jar, brought him to a large pond, and threw him in. There he continued to grow for very many years. Although the pond was two *yojanas* long and one broad, the lotus-eyed fish found in it no room to move; and again said to Manu: ‘ Take me to Ganga, the dear queen of the ocean-monarch; in her I shall dwell.’ Manu accordingly took the fish and threw him into the river Ganga. There he waxed for some time, when he again said to Manu:’ From my great bulk I cannot move in the

⁵⁹⁰ Z.A. Ragozin, *The Story of Vedic India* (London: Putnam Sons, 1895), 335-348, <http://www.googlebooks.com>.

Ganga; be gracious and remove me quickly to the ocean.’ When he had been thrown into the ocean, he said to Manu: ‘Great lord, thou hast in every way preserved me: now hear from me what thou must do when the time arrives. **Soon shall all these terrestrial objects, both moving and fixed, be dissolved. The time for the purification of the worlds has now arrived. I therefore inform thee what is for thy greatest good. The period dreadful for the universe, moving and fixed, has come. Make for thyself a strong ship, with a cable attached; embark in it with seven Rishis and stow in it, carefully preserved and sorted, all the seeds which have been described of old by Brahmans. When embarked in the ship, look for me; I shall come recognizable by my horn. So shalt thou do. I greet thee and depart. These great waters cannot be crossed over without me. Distrust not my word.**’—Manu replied: ‘I shall do as thou hast said.’ After taking mutual leave, they departed each on his own way. **Manu then, as enjoined, taking with him the seeds, floated on the billowy ocean in the beautiful ship.** He then thought on the fish, which, knowing his desire, arrived with all speed, distinguished by a horn. When Manu saw the horned leviathan, lofty as a mountain, he fastened the ship’s cable to the horn. Being thus attached, the fish dragged the ship with great rapidity, transporting it across the briny ocean, which seemed to dance with its waves and thunder with its waters. **Tossed by the tempests, the ship whirled like a reeling and intoxicated woman. Neither the earth, nor the quarters of the world appeared; there was nothing by air, water, and sky.** In the world thus confounded, the seven Rishis, Manu and the fish were beheld. So, for very many years, the fish, unwearied, drew the ship over the waters, and **brought it at length to the highest peak of Himavat.** He then, smiling gently, said to the Rishis: ‘**Bind the ship without delay to this peak.**’ They did so accordingly. And that highest peak of Himavat is still known by the name of NAUBANDHANA (‘the binding of the ship’). The friendly fish then said to the Rishis: ‘I am PRAJAPATI BRAHMA, than whom nothing higher can be reached. In the form of a fish I have delivered you from this great danger. **Manu shall create all living beings-gods,asuras, men, with all**

worlds and all things, moving and fixed. By my favor and through severe austere fervor, he shall attain perfect insight into his creative work and shall become bewildered.’ Having thus spoke, the fish in an instant disappeared. **Manu, desirous to call creatures into existence, performed a great act of austere fervor, and then began visibly to create all living things.”**

b.) The Bundaba Flood Story -Australia (Figure 5)⁵⁹¹

“Long, long ago there was a **great flood**. It originated from the fact of some children who found the ‘winking’ owl in a tree and plucked out all its feathers. They forced a grass reed through its nose and treated the bird most shamefully. The bird flew without wings, into the heavens and showed himself to Ngowungu, the Great Father. **Ngowungu became very angry and decided to drown the people.** Later the people saw a small cloud rising which grew bigger and bigger till it spread all over the sky. The thunder began to roll and crash and the people were greatly afraid,. **With the rain and thunder was a terrible wind which broke great limbs off trees and rooted up others.** **During this terrible storm there was a noise above the awful crashes of thunder. This noise was coming from the north. The flood rose higher and higher till all the land was covered except the tops of two or three mountains.** From further west a man and his wives with a dog were battling their way in a canoe when a bird with a leaf in its mouth flew in front of them showing them the way to Mt. Broome. They eventually reached Mt. Broome and landed there where some other survivors were. Then Djabalgari, the great left-handed man incised his little finger and let the blood trickle down into the flood waters. The **waters began to go down and eventually disappeared off the country. All other people were drowned.”**

c.) Flood Story from the Macusi Indians of British Guiana⁵⁹²

⁵⁹¹ J. Bird, "The Bubdaba Story," *Ex Nihilo* 5(1) (1982): 7.

⁵⁹² A. Humboldt, *Aspects of Nature* (Philadelphia, PA: Lea and Blanchard, 1849), 161.

Humboldt quoted Sir Robert Schomburgk (from 1836) “On the religious traditions of the Macusi Indians, who inhabit the Upper Mahu and a part of the Pacaraima Mountains”...“ The Macusis believe that the **sole survivor of a general deluge re-peopled the earth** by changing stones into human beings.” This myth (the fruit of the lively imagination of these nations, and which reminds us of Deucalion and Pyrrha) shows itself in a somewhat altered form among the Tamanaka of the Orinoco. When asked how mankind survived the **great flood**, the ‘age of waters’ of the Mexicans, they reply, without any hesitation, that ‘**one man and one woman took refuge on the high mountain of Tamanacu**, on the banks of the Asiverre and that they then threw over their heads and behind their backs the fruits of the Maurita-palm, from the kernels of which sprang men and women who **repeopled the earth.**’⁵⁹³

From these accounts, which are just representative of accounts found in virtually every culture of the earth;⁵⁹⁴ the common threads are seen of : sinful men, judged by god(s), a watery flood destroying all except a righteous man and his family, preserving stocks of their animals and/or plants(India- possibly due to vegetarian habits), being saved in a vessel, landing on a mountain, making a sacrifice to the god(s), and then repopulating the earth. Interestingly there are stories of the surviving man and woman throwing a rock or plant over their back to regenerate mankind from South America and Greece. It is highly probable that this reflects a common source for this concept. It is also highly probable that there is a common source for many flood stories found throughout the world.

⁵⁹³ Rendell quoted Apollodorus regarding Deucalion: “When Jupiter determined to destroy the brazen race, Deucalion, by the advice of Prometheus, made a great ark, and put into it all necessary things, and entered it with Pyrrha. Jupiter then pouring down heavy rains from heaven, overwhelmed the greatest part of Greece, so that all men perished except a few who fled to the highest mountains. He floated nine days and nights on the sea of waters, and at last stopped on Mount Parnassus. Then Jupiter sent Mercury to ask him what he wished; and he solicited that mankind might be made again. Jupiter bade him throw stones over his head, from which men should come; and those cast by Pyrrha should be turned into women.- Apoll., 1. i., p. 23.” R.E. Rendall, *The Antideluvian History* (London, ENG: F. Pitman, 1876), 280.

⁵⁹⁴ J. Bergman, *Creation and Flood Myths*, (2003), 517.

The clustering of language groups

Another important issue that is germane to the present topic is the development of language regarding the origin of man, and its relation to the flood story.

Oller⁵⁹⁵ and others⁵⁹⁶ have argued that it is uniquely a human skill, and that it does not have an evolutionary counterpart.⁵⁹⁷ The Bible presents the Table of Nations in Genesis and the dividing up of people groups and languages at the Tower of Babel in Chapter 11. Hamilton⁵⁹⁸ discussed at length the expansion of the sons of Noah into the regions north (Japheth), east (Shem) and south (Ham) as represented in **Figure 6**.

⁵⁹⁵ J.W. Oller et. al. quote N. Chomsky, "The rate of vocabulary acquisition is so high at certain stages of life, and the precision and delicacy of the concepts acquired so remarkable, that it seems necessary to conclude that in some manner the conceptual system with which lexical items are connected is already substantially in place." Per Oller, "The whole system must be in place before it can be employed to interpret experience." J.W. Oller and J.L. Omdahl, "Origin of the Human Language Capacity: in Whose Image?," in *The Creation Hypothesis Scientific Evidence for an Intelligent Designer*, ed. J.P. Moreland (Downer's Grove, IL: InterVarsity Press, 1994), 235-269.

⁵⁹⁶ These authors, on page 93, quote the Cambridge Encyclopedia of Human Evolution, "there are no non-human languages". They go on to say that, "humans have an innate, built-in hard-wired ability to acquire and communicate complex language from the moment of their birth. Animals do not." B. Thompson, B. Harrub and D. Miller, "The Origin of Language and Communication," *Journal of Creation* 17(3) (2003), <http://www.trueorigin.org/language01.asp>.

⁵⁹⁷ B. Thompson *Origin of Language*, (2003).

⁵⁹⁸ Hamilton has identified many of the localities listed for each of the sons:

1) Japheth—Madai (Medes between the Tigris and the Caspian Sea); Tubal (Tabali in eastern Anatolia); Ashkanaz (a grandson in the upper Euphrates and Armenia); Elishah (the island of Cyprus); Tarshish (Spain or farther on including "open sea"); kittim (Kition the Phoenician city on Cyprus); and other island nations. Thus Japheth trended northward.

2) Ham—Cush (northwest Africa); Mizraim (Egypt); Canaan (Cannan); Raamah (son of Cush African/Arabian tribe); Nimrod (Babylon?); Jebusite, Gergashite, and Amorite (Cannan); Arvadites (inhabited Arvad in Phoenicia and are associated with Tyre); and others. Ham trended into Africa.

3) Shem—Elam (east and northeast of the Euphrates and of Mesopotamia); Uz (northeast Mesopotamia); Eber (from Ebla); Joktan (the father of several Arab groups his sons) and others. Shem trended into the east. Hamilton, V.P., *The New International Commentary on the Old Testament*, ed. R.K. Harrison and R.L. Hubbard Jr., *The Book of Genesis Chapters 1-17* (Grand Rapids, MI: W.B. Eerdmans Publishing Company, 1990).

Three major language groups follow this same pattern. The Indo-European language group is found in the European, Siberian areas and down into India. The Afro-Asian group is found on the African Continent and the Sinai Peninsula, and the Sino-Tibetan languages are found in the southern Indian, Pacific Islands, and China, and by extension through the Ket language into North America and the Athabascan language group. It is now accepted by many experts that the Athabascan group of languages, the largest group of languages used by Native Americans, is derived from the Yeniseian language—a remnant of the Ket group of languages in Siberia (**Figure 7**).⁵⁹⁹

There are some who consider the Chinese hieroglyphics to be derived from Egyptian sources.⁶⁰⁰ As well, some cultures in the Middle America had a form of hieroglyphic writing, with even carved images of two-headed dragons.^{601,602} Dragons, with deity-like qualities, four clawed legs and wings, or horned serpents without wings, are well known motifs in China,⁶⁰³ Europe,⁶⁰⁴ Mesopotamia,⁶⁰⁵ and Meso-America (**Figure 8a-f**).⁶⁰⁶

⁵⁹⁹ Dene-Yeniseic Symposium February 26-29, (Fairbanks and Anchorage: 2008), <http://www.uaf.edu/anlc/dy2008.html>.

⁶⁰⁰ A. Kircher, *China Illustrata Translated from the 1677 original Latin edition*, trans. C.D. Van Tuyl (self publish: 1988).

⁶⁰¹ Norman discussed Maya and Aztec hieroglyphic writing. J. Norman, *Ancestral Voices Decoding Ancient Languages* (New York: Barnes and Noble, 1975), 134-176.

⁶⁰² W.H Holmes, "The Great Dragon of Quirigua," *Art and Archeology* (1916 reprint).

⁶⁰³ In the dedication Xu stated, "This research is dedicated to my father, Dr. Hai-lan Xu, a professor of neurology from Shanghai, China, who has inspired me to undertake exploration of ancient migration. Throughout the years, he has heard and read various reports and information on the ancient Chinese travelling to America, the similarities of DNA tests between Native Americans and Chinese, the physical resemblance of American Indians and Chinese mountain people, and the closeness of their languages. Curiosity and persistence do prevail. These results are the best answer to his calling." Then on page 32 he stated, "The dragon (serpent), benign and good-natured, was believed to symbolize a giver of life—a great fish with feet and a serpent with wings- it brought fertility and abundance as well as knowledge and wealth. A blue-green dragon could shrink to the size of a silkworm or swell up to cover the earth, and his playing in the clouds would cause rain to fall. An ancient Chinese book, *Record of Strange Things*, described the dragon (serpent) in this way: 'A water-snake changes into a fierce four-legged serpent after five hundred years; a fierce *jias* serpent changes into a dragon after a thousand years; a dragon changes into a horned dragon after five hundred years, and a horned dragon changes into a feathered dragon after a thousand years' (Shao, 1983). This concept corresponds to the Olmec belief of animal

In the 1990's significant support for Asian to Mesoamerica socio-economic interactions were discussed by Prof. Mike Xu and Han ping Chen. It was found that many of the glyphs of the Shang Dynasty (China) and the Olmec Culture (Mesoamerica) were similar.^{607,608}

It was surmised that the Shang may have migrated to the Americas in 1100 A.D. after they were deposed by the Zhou. In the context of the Biblical narrative this would of necessity have been a much later migration than that expected post-flood, but it does support other evidence that a migration from Asia to the Americas occurred much earlier than generally accepted among some anthropologists. As well, there is an intriguing glyph at Izapa, pre-Mayan, that may relate to a flood story. It is stela number 67.⁶⁰⁹ It has a "god" sitting in a canoe measuring time. The measure of time indicates a specific event. It has been

totems". H. M. Xu, *Origin of the Olmec Civilization* (Edmond, OK: University of Central Oklahoma Press, 1996), V and 32.

⁶⁰⁴ Saint George and the dragon.

⁶⁰⁵ Smith, 1896, 95. On that page there is a figure of "Bel Encountering the Dragon, From Babylonian Cylinder."

⁶⁰⁶ A. Stone, "Variety and Transformation in the Cosmic Monster Theme at Quirigua, Guatemala," in *Fifth Palenque Round Table 1983*, ed. V. Fields, 39-48, www.mesoweb.com.

⁶⁰⁷ This was a short news summary taken from an article in the U.S. News and World Report 11/4/96. The editorial reported that Han Ping Chen, a specialist in the Shang language, when he was shown Olmec scripts exclaimed "I can read this easily... Clearly these are Chinese characters." Prof. Mike Xu, a professor in Chinese history, later meet with Chen to compare and discuss markings from other pre-Columbian artifacts. They found significant similarity between the two scripts of the separated societies. Xu included this in his book, *Origin of the Olmec Civilization*. From: Livingston, D, "Tale of Two Cultures: Ancient Chinese Dunasty Linked to New World's Earliest Civilization," *Bible and Spade* 11:3 (1998): 70-2.

⁶⁰⁸ Prof. Xu shows a series of similar characters of the scripts between the Olmec and the Shang. Xu, Mike "Transpacific Contacts?", http://www.chinese.tcu.edu/www_chinese3_tcu_edu.htm. Accessed 2009.

⁶⁰⁹ J. Guernsey, *Ritual and Power in Stone* (Austin, TX: University of Texas Press, 2006), 62.

considered a creation glyph by many, but there are similar glyphs of this “god”, i.e. stela 11,48 that do not have him in a canoe.⁶¹⁰

Based on the associations of major language groupings, pictogram/hieroglyphic writings, and the record of Genesis 11, mankind appears to have expanded outward into the world from the area of Mesopotamia.

Common technologies found among various widely separated cultures

There appear to be common technologies in widely separated areas of the world. There are step pyramids in the Middle America, and Egypt (**Figure 9a,b**). Bone and stone tool development is very similar in wide spread areas (**Figure 10a-h**). Clay ladles are similar between regions (**Figure 10g, h**). Grinding stones are alike (**Figure 10c, d**). Throwing sticks, boomerangs, and adaladals are present on different continents (**Figure 10a, b**). Techniques for making pottery appear similar as well.⁶¹¹ Regarding art forms, the swastika, as a symbol of the cycling of life, is found throughout ancient cultures (**Figure 11a-j**).^{612,613} Common animal motifs, especially birds, are seen on pots from the Middle East, Australia, and Southwest America (**Figure 12a-f**). Religious motifs such as ceremonial pots with images on them, anthropomorphic clay figurines are seen in both the US and the Middle East (**Figure 12c, d**). There are dual receptacle vessels which have marital symbolism in the Southwest U.S. and are found in other areas as well (**Figure**

⁶¹⁰ "Important New Discovery at Tak'alik Ab'aj," J. Reed, ed., Institute of Mayan Studies Newsletter, 37, no. 5 (2008).

J.M. Jenkins, a Mayan researcher, was noted as saying that stela #48 was very similar to those of stela #10, 11, 67, and 22. Jenkins further elaborated on this on a web page entitled "Some Iconographic and Cosmological Observations on the Symbolism of the new Stela 48 from Tak'alik Ab'aj." <http://alignment2012.com/Talkalik48.html>.

⁶¹¹ O. S. Rye *Manuals on Archeology*, vol. 4, *Pottery Principles and Reconstruction* (Washington: Taraxacum, 1981).

⁶¹² D.V Villaseñor et al., *Indian Sandpainting of the Greater Southwest* (Healdsburg, CA: Naturegraph Company Publishers, 1963), 4.

⁶¹³ The Swastika is found throughout the earth and in different time periods. The Wikipedia article demonstrates pictures from current day India to ancient Middle East coins. Pictures of Native American artifacts are shown as well. *Wikipedia*, "Swastika.", www.wikipedia.com.

12e, f). The images of a god and other spirits are often represented in a similar motif in wide spread regions (**Figure 13a-c**). Some rock art in the Southwest may reflect creation stories as well as a flood story (**Figure 14a, b**).

Civilizations appear to be markedly complex from the earliest times, e.g. Sumer, and appear to be founded initially in the southern Mesopotamian valley, and then spread throughout the world.

CONCLUSION (FOR GENERALIZIBILITY)

There are data in the various fields of science and anthropology that are consistent with what might be expected with a worldwide flood like the Noah flood account.

These include:

1. The vast percentage of the earth's land (continental crust) is covered with sedimentary rock and secondarily by volcanic rock. Most, if not all, strata give evidence of being laid down quickly, continuously, and sequentially.
2. There are large numbers of fossils of animals and plants that appear to have been buried rapidly, catastrophically (they are often crushed, and piled together), and preserved quickly.
3. Biological studies support animals breeding within groups with great variety, but not among different groups—unless artificially. This appears to require the preservation of both a male and female of a given type during catastrophes to maintain a breeding stock.
4. Studies on the mtDNA of the human race are consistent with the development of all races from a small initial group in the recent past, most likely located in the Middle East/Africa. Population studies support the recent expansion of the human population, as well as animal groups, from small initial groups.
5. Anthropological/archeological studies from throughout the world reveal information that is consistent with a common source for the story of a worldwide flood and the origin and migration of early populations from the Middle East, most probably the Mesopotamian Valley, into the rest of the world.

The implications of these studies will be discussed in the Discussion portion of this dissertation.

See Volume 2 for Figures and Tables

Generalizability

Geology, Biology, and Antropology

DISCUSSION

INTRODUCTION

In using the TNR to evaluate the Noah Flood account it becomes important to consider what kinds of narratives the TNR can discriminate among. It can be used to assess and separate a true, correctly perceived eye witness account from errors, lies, and fictions. Oller defined a narrative as “ A narrative, of course, is a story that unfolds over time, and a true one (in the most mundane and unpretentious sense of ‘true’) is merely one that pertains to actual material entities situated in space and time rather than merely imagined one situated only in someone’s imagination.”⁶¹⁴ A TNR is composed of three parts: 1) Determinancy, 2) Connectedness, and 3) Generalizability. Determinancy is the “material content of the sign,” Connectedness the “content of the sign is determined in time and space,” and Generalizability “the sign can be connected to any material context similar to the one at hand.”^{615,616} (See Figure in Methods entitled Narrative Formation.)

Signing is the process by which a TNR is communicated from one individual to another.⁶¹⁷ The development of signing (verbal or nonverbal) involves 3 parts: 1) an object (**Icon**); 2) linkage to an action (**Indexing**); and 3) **Symbolization** of the icon and

⁶¹⁴ J. W. Oller, K. Kunok, and Y. Choe, "Can Instructions to Nonverbal IQ Testing be given in Pantomime? Additional Applications of a General Theory of Signs." *Semiotica* 133-1/4 (2001), 15-44.

⁶¹⁵ J. W. Oller *Adding Abstract to Formal and Content Schemata*, 1995.

⁶¹⁶ In a TNR determinancy looks at the words that are used in the narrative. Are they associated with real icons with real properties? A true narrative will use words that connect the story to actual observed activities and things of life. With connectedness, does the story have a logical understandable time line sequence? Is there a beginning and an end? Finally, with generalizability, can the story be reproduced or if it was a one time event can residue of it be found? A TNR will have all of these properties.

⁶¹⁷ On page 265 Oller et. al. discuss language acquisition in children. They said, "For language acquisition to proceed at all, it is essential for the child to have access to true representations that are fitted into a meaningful narrative-like sequence of experience. That is, the child has to have access to activities of the sort that involve the use of signs to be acquired and the signs have to be appropriately applied in those contexts.... language acquisition requires exposure to what we have called true narrative representations." J.W. Jr. Oller, S.D. Oller, and L.C. Badon, *Milestones Normal Speech and Language Development Across the Life Span* (San Diego: Plural Publishing, 2006), 265.

its indexing. The symbol, as a sign, may be spoken, written, drawn, or otherwise expressed.⁶¹⁸ Its usage becomes accepted by a group of signers.⁶¹⁹ In the signs that are developed there are “universal” and “particular” signs and they do not overlap.⁶²⁰ Particulars can be pointed to in time and space but generals, i.e. universals, cannot (they include every possible entity and can even be extrapolated to nonexistent entities). TNRs will always include a particular sign(s). (See Figure in Methods section entitled Language Formation.)

Fiction, errors, and lies are all derived from TNR’s, but are deficient in at least one of the criteria:

- 1) Fiction: Oller used the example of Tom Sawyer- while the Mississippi River was real and the described raft was consistent with known ones, it did not exist in a real time/space continuum. He stated, “... the arguments of the fiction has no material substance and occupies no real place in space and time (except as grounded in TNRs through the real existence of the historical Samuel Clemens alias Mark Twain, the real Mississippi River, the institution of slavery in the United States until the Civil War, etc.).”⁶²¹
- 2) Errors: “are fictions mistaken to be TNRs (and thus represented to be true though they are false)... They are deficient in two of the elements of TNRs- the material element and the representation.” It is told as being true by someone who thought it true.⁶²²
- 3) Lies: “... are deficient in all three formal elements of a TNR.” There is nothing more degenerate or meaningless than a lie per Oller.⁶²³

⁶¹⁸ Many cryptographers believe that the alphabetical writing we have now developed out of hieroglyphic forms. D. Goldwasser, "How the Alphabet Was Born from Hieroglyphs," *Biblical Archeology Review* 36:2 (2010), bib-arch.org/ (accessed May 27, 2010).

⁶¹⁹ Ibid Oller et. al. on page 469 define the sign cycle, “the growth of sign systems beginning in icons, moving to indexes, and finally to more and more abstract symbols; the process by which icons are used in constructing indexes which in their turn are used in constructing symbols; all of which are subsequently used to enrich the experience of the objects, relations, and meanings that they represent.”

⁶²⁰ Oller et. al., *Instructions to Non-Verbal IQ Testing* (2001) 28.

⁶²¹ Ibid Oller et. al., 29.

⁶²² Ibid Oller, 29.

Other linguistic constructs which include myths, sagas, and legends, must contain parts of the elements of a TNR, or have grown out of one, though by their definition they are deficient in at least one of the areas.⁶²⁴ For example, an etiologic legend is usually considered to have a kernel of truth, it contains something that did occur at one time, but it has been modified over time so that it contains elements of embellishment- for the purpose of teaching a particular point, often a moral one. Some have called Genesis a collection of legends.⁶²⁵ But that view is challenged in this present work.

Thus a TNR must be true in all its three elements. Does the story have known object related words used in it, called **Determinancy**? Are they are connected in a time/space continuum which is referred to as **Connectedness**? Finally, are there residual evidences of the event, or can it be reproduced, which is identified as **Generalizability**? The TNR must have all three components. A TNR can be within one of the others, e.g. lies etc., but one of them cannot be part of a TNR. For example the Mississippi River, and a description of it, can be contained within a Fiction like Huck Finn, but the story of Huck Finn cannot be contained within the description of the Mississippi River and that description remain a TNR (see **Figure 1**).

This current writing supports the position that the Noah flood account within the Genesis record is not a fiction, error, lie, legend, myth, or saga but a true narrative representation. This will be reviewed below.

⁶²³ Ibid Oller, 29.

⁶²⁴ See Methods Section for further definitions.

⁶²⁵ On page 3 Gunkel, a supporter of the Documentarian Hypothesis, stated, “But legends are not lies; on the contrary, they are a particular form of poetry.” And on page 74 he comments, “...legends are not free inventions of the imagination. On the contrary, a legend adopts and works over certain data which come from reflection, tradition or observation.” G. Gunkel, *The Legends of Genesis* (New York: Schocken Books, 1901, reprint 1964).

DETERMINACY

A true narrative is composed of a series of objects (physical, or identified with something physical), described in a logical time space continuum. Thus it is composed, at its core regardless of the culture or sociologic age, of nouns, verbs, modifiers, and direct objects. Determinacy tends to deal with those words, surface forms (symbols) that are associated with the nouns, direct objects, and occasional descriptive action verbs.

When reviewing the types of words used to describe the Noah Flood Account several points are of importance:

- There are a few unique words, in the Bible, that apply only to that particular event. Yet, they are easily understood as to what they represent by the reader. Of significance is flood and ark. The flood is presented as a unique, one time, event. The word for the ark is used only of Noah's boat and Moses' vessel. It thus supports the ideas of both a spiritual and an historical event. The concept of the uniqueness of the flood is supported by these isolated but key words.
- Many of the other words used have common roots with ones from other ancient languages of the Near East. This would be supportive of the antiquity of the text.
- The majority of words used describe common physical entities that a reader could easily relate to. In true narratives the objects of the story must be real. A real boat, animals, land, water, humans are part of the story.
- The purported eyewitness, Noah, is described a real man in the story and elsewhere in the Bible. It is written in the third person, but the quotes of God were written in the first person.

A. Nouns**1. Flood**

The word used for flood in Genesis, *mabbul*, is truly unique to the story of the Noah flood in the Bible. As well, it usually contains the prefix for "the" connoting "the flood" indicating it to have been a well known but single event. There is no accepted

derivation of the word (from other ancient languages) among the scholars, and it may have been created by the original writer for “the” event. As well, it can’t be an allegory as it is put within the context of covering all the hills, dramatic geological changes, and of drowning those not in the ark- all of which are well described as physical structures and entities. The only other place it is used is in Psalm 29 and seems to demonstrate that while other gods are part of the creation the one true God “sits enthroned above it.” He is thus presented as being over *baal* the storm god.⁶²⁶

The unique presentation of the Biblical flood story also appears to be a rebuke of the other flood stories of the region. While it contains so many components that are similar to the Mesopotamian ones—i.e. Atrahasis and the Epic of Gilgamesh, it also contains some very distinctly different and contrasting ones. In the Genesis account there is one God in absolute control of the flood, it occurs because of the sin of man, and God purposefully saves one man (and his family) through it. The Mesopotamian stories have the gods meeting in committee, one dissenting god choosing to help a man but not even sure if he (man) makes it through the flood, and that the gods are not completely in control of the flood and are afraid of it.^{627,628} The significance of this is that the writer of Genesis appears to have had knowledge of the Mesopotamian accounts,⁶²⁹ and he

⁶²⁶ See footnotes in Determinancy on the term for flood.

⁶²⁷ NIDOTTE Section on the word “flood” by G.J.Wenham. He states, “Stories of a universal deluge are known around the world (B.Lang, *Anthropos* 80, 1985, 605-16), but as would be expected, the closest parallels to the biblical account of the Flood are those found in the Sumerian Flood Story, the Atrahasis Epic, and the Gilgamesh Epic tablet 11... These texts in their main versions date from about 1600 BC... contrasts between biblical and other ANE attitudes are even sharper in the accounts of the Flood. In Genesis there is but one God who plans and executes the Flood and delivers Noah. In the Gilgamesh Epic it is a committee decision to flood the world, and one of the dissenting gods plots the escape of his devotee, Utnapishtim. In Gilgamesh the gods are scared by the Deluge they have unleashed, ‘cowering like dogs against the wall’ a trait wholly alien to the God of Genesis. Indeed, most striking of all, when Enlil arrives at the sacrifice, he is surprised to find that Utnapishtim survived the Flood. Though one of the supreme gods in the pantheon, he neither controlled nor knew what was happening in the world.” This is of course in striking contrast to the God of Genesis who knew fully what was going on, and orchestrated the events of the Flood.

⁶²⁸ N. Osanai, "A Comparative Study of the Flood Account in the Gilgamesh Epic and Genesis" (Masters Thesis, Wesley Bible Seminary), 2005, www.answersingenesis.org. Accessed 1/12/10.

⁶²⁹ This can be inferred from the fact that the writer of Genesis was aware of the Tower of Babel, and of the futility of it. Gen.11:1-9.

wrote in contrast to these, but still used the same basis facts of those stories.⁶³⁰ Some would argue that Genesis therefore was derived from those accounts, but this is not necessarily so.⁶³¹ It can be contended that there was knowledge of the One True God that continued from the time of Adam, and that the writer of Genesis was aware of this, and thus wrote a defense of Him in contrast to the Pantheon of Mesopotamian gods. It is clear that the writer of Genesis was presenting a flood story in sharp contrast to the Mesopotamian ones. While the main archeological tablets from Mesopotamia date to about 2000-1700 BC (**Figure 2**), it is commonly believed that the originals date much earlier. Thus, the Genesis account would date to a similar early time. This is supported by the use of words in the flood story that have ancient language roots such as those for hill, mountain, ground, descriptive words regarding the ark's structure, and animal terms.⁶³²

There are many who propound that The Flood was only a local event. The present debate, among these advocates, involves those who ascribe the Noah flood account to the history of local flooding in the Mesopotamian Basin- first propounded by

⁶³⁰ Clay wrote on page 5 of his book, "This story of the deluge which had found its way into Babylonia, where it was made to conform largely to the Akkadian dialect, fully betrays its origin; it came from the same source whence the Hebrew traditions came, namely from the people who lived in Amurru (Syria and Mesopotamia), called the Amorites. As was the case in pre-Mosaic days, and to a large extent in early Israel, when henotheism prevailed, 'God' is the foremost deity." A. Clay, *A Hebrew Story in Cuneiform* (New Haven, CN: Yale Press, 1922).

⁶³¹ Ibid. Clay comments on this position on page 5 and 6, "It has been generally held that these stories [flood and creation] are of Babylonian origin; that Canaan was a domain of Babylonian culture in the time of Moses; and that Israel had assimilated this foreign culture as well as its religion, 'feathers and all.' Not only is the Israelitish cult held to be dependent upon the Babylonian, but also many of the chief characters are said to have descended from Babylonian mythology. In Germany where these views developed, some scholars have gone to great extremes; only a change of names had taken place, and Marduk or Bel was transformed into Christ. In America a more moderate position has generally been accepted, in which the extreme views were toned down, and the Pan-Babylonian theory made more palatable. Nevertheless, it is generally held that these traditions had been brought from Babylonia in the time of Abraham, or in the Amarna Period, or at the time of the exile; and that many of the characters had their origin in myth. Twelve years ago the writer [Clay] took issue with this general position, holding that the traditions of the Hebrews were indigenous in the land of the Amorites,---" [Inserts by the present author.]

⁶³² See Determinancy section.

Woolley,⁶³³ versus flooding of the Black Sea. Dalley and other Assyriologists favor the Mesopotamian source.⁶³⁴ Other support the Black Sea flooding from the Mediterranean Sea post the Glaciation Period meltdown.^{635,636} Yet a third view within recent years, which contains a considerable body of literature, primarily from Russian scientists,

⁶³³ This author linked the Genesis flood as being derived to local flooding in the Mesopotamian delta region. On pages 31-32 he stated, “The mere fact that the scribes recorded antediluvian kings and mention cities which existed before the Flood must signify that the Sumerian occupation of the country dated from before that great disaster. The King-lists only mention the Flood, the description of it is preserved in the well-known Deluge Epic and, of course, in **that variant which is the Flood story of Genesis. However much tradition may have magnified and coloured the account,** it would be absurd to deny the ultimately historical character of a story which bears on itself the stamp of truth; the details harmonize so perfectly with **the local conditions of the southern delta that only here could the tale have originated.** Floods arising from various causes are common in Lower Mesopotamia, and it only requires just such a combination of these causes acting simultaneously as is actually described in the legend for an inundation to take almost the proportions attributed to the Deluge of Noah’s day. **The total destruction of the human race is of course not involved, nor is even the total destruction of the inhabitants of the delta;** thus some at least of the antediluvian cities survive into historic times, but enough damage could be done to make a landmark in history and to define an epoch.” C.L. Woolley *The Sumerians* (New York: W.W. Norton and Co, 1965, reprint).

⁶³⁴ Dalley commented on page 4-5, “Atrahasis, the hero of the Flood story, was a citizen of Shuruppak in lower Mesopotamia. An extensive flood as a natural event sometimes took place in that region, where the Euphrates in spate can overflow and spill across the intervening land into the lower-lying Tigris, which itself often breaks its own banks in sudden spate, but a flood would be impossible on a similar scale in Palestine... Such floods occur quite commonly in Iraq, and strata of silt deposits on Early Dynastic sites of the fourth millennium BC, found there by archeologists, can be interpreted as recording various different floods in remote antiquity. That evidence does not, however, disclose whether one particular flood was more catastrophic than others; it only shows that no unusual break in cultural continuity was caused by such a deposit.”... She accepts long ages for the earth and the process of evolution (page 5). As well, she comments on page 8, “**Where Flood stories are found in other parts of the world, missionaries and early Christian travelers may have disseminated them, there is no reason to suppose that they are indigenous.**” S. Dalley, *Myths from Mesopotamia Creation, The Flood, Gilgamesh and Others* (Oxford, England: Oxford University Press).

⁶³⁵ The book cover stated, “Sophisticated dating techniques confirmed that 7,600 years ago the mounting seas [post glaciation melt] had burst through the narrow Bosphorus valley, and the salt water of the Mediterranean had poured into the lake with unimaginable force, racing over beaches and up rivers, destroying or chasing all life before it. The margins of the lake, which had been a unique oasis, a Garden of Eden for an advanced culture in a vast region of semi-desert, became a sea of death. The people fled, never to return.” Thus in their story they include flooding covering former homes, death, and a sort of expulsion from a type of Garden of Eden. W. Ryan and W. Pitman, *Noah's Flood* (New York: Simon and Schuster, 1998).

⁶³⁶ Wilson extended the work of Ryan and Pitman to include the underwater scanning of Ballard. His findings appear scant, but if they represent building structures the association to a flood story such as the one in the Bible is unclear. Wilson does quote Diodorus regarding what appears to be a local flood legend of the island of Samothrace. But this does not address at all the uniformity of flood stories found worldwide-see further on in this section. As well, Russian scientists contest whether the time period flood of Ryan and Pitman was of any significance. See below. I. Wilson, *Before the Flood* (New York: St. Martin's Press, 2001).

argues for repetitive flooding of the basin of the Black Sea area from the Caspian Sea and other river drainages into it (see **Figure 3**).⁶³⁷

As has been stated earlier, if the Noah Flood account was only local, it would be almost impossible to differentiate it from the numerous historical local flooding events from all over the world. Thus local flood advocates are able to take any one of several positions- Mesopotamian flooding, Mediterranean to Black Sea flooding or Caspian Sea and other drainage system(s) to Black Sea flooding, or other multiple local flooding events worldwide as the source of the Noah Flood account. But this is not consistent with the wording of the Biblical flood account. “The Flood”⁶³⁸ is a unique word phrase, and there are other words in the Bible used for local flooding.⁶³⁹ It is coupled with phrases

⁶³⁷ The author of this article V. Yanko-Hombach stated, “Pleistocene inundation was intense and substantial whereas the Early Holocene sea-level [Ryan and Pitman’s flood] rise was not... When the Black Sea re-connected with the Sea of Marmara at about 9.5ky BP, inflowing Mediterranean water increased the Black Sea level very gradually up to ~-20m, and in doing so raised the salinity of the basin and brought in the first wave of Mediterranean immigrants. These data indicate no major drawdown of the Younger Dryas, and they do not provide evidence for any catastrophic flooding of the Black Sea in the Early Holocene.” She went on to state that no significant population dynamic changes around 14 ky and 6 ky BP “could be linked to an inundation of large magnitude.” She also had an abstract titled Current status of the Early Holocene Flood Hypothesis in the Black Sea. In: The International Geological Congress HPQ-02 Black Sea? Mediterranean Corridor during last 30 ky: Sea Change and Human Adaptation. In it she says, “Most researchers found Early Holocene flooding of the Black Sea to be a myth... no significant cultural changes characterize the archeological record of the region during the 8.4-8.2 ky BP interval coeval with the proposed flood.” She did describe fresh water flooding occurring 17 ky BP due deglaciation, but not from a Mediterranean source. Thus, it appears that the area has had multiple flooding episodes, without any cultural changes, and only had changes in the saline content when there became communication with the Mediterranean in about 8.4-7.2 ky BP, per the authors estimation. This is in complete conflict with Ryan and Pitman’s views. V. Yanko-Hombach, "Controversy over the Great Flood Hypotheses in the Black Sea in Light of Geological, Paleontological, and Archeological Evidence," *Quaternary International* 167-8 (2007), 91-113, <http://www.Cat.inist.fr/?aModele+afficheN&cpsid=18869474>.

⁶³⁸ See Determinancy section on the flood- *mabbul*.

⁶³⁹ NIDOTTE nahar (H5643) “(a) The literal meaning of נַחַל applies to a rushing torrent or a flowing stream, rather than to a deeper, steadier river... (b) The presence of such anticipated torrents of water provided the biblical writers with a number of images. Isaiah forewarned the nation that in the coming judgment their ‘streams will be turned into pitch’ (Isa 34:9). Jeremiah saw the invading armies that would cover the land as an overflowing torrent (Jer 47:2). And with a series of bold descriptions of the Lord in judgment, Isaiah says that his breath will be like a flowing stream (Isa 30:28), indicating that wrath will be poured out swiftly. All of these uses indicate a local or metaphorical use of the word.

NIDOTTE “(H8851) שָׁטַף (šāṭap), q. wash away, flood, overflow; ni. be washed off, pu. be washed off (H8851); שֶׁטַף (šēṭep), nom. Flood...” “Jer 47:2 This is what the LORD says: “See how the waters are rising in the north; they will become an **overflowing** torrent. **They will overflow** the land and everything in it, the towns and those who live in them. The people will cry out; all who dwell in the land will wail...”

such as “all mountains” were covered, “all flesh died” (outside the ark), and the ark was a very large structure (see below). The wording and the context of those words (to be discussed further) does not allow one to read the Noah flood account as local and be accurate to the text. As well, there is evidence for people groups having a concept of a global earth and thus some understanding of the vastness of the flooding involved **(Figure 4)**.⁶⁴⁰

2. Ark

As was mentioned in the review of this word in the Determinancy section, it clearly was a physical boat, with sea worthy dimensions (in contrast to the one in the Mesopotamian stories), and yet it was also symbolic of God’s preserving grace of certain individuals.⁶⁴¹ It too, is unique in its use in the Bible as was the term used for the flood. Whether it is derived from an Egyptian term is still being debated among the scholars.⁶⁴²

It was given very specific dimensions, 300 cubits by 50 wide by 30 in height, which has been shown to be a sea worthy shape.⁶⁴³ It had no sail or rudder, but did have a door and window. It was built of a woody material,^{644, 645} and sealed by a sealant—probably

⁶⁴⁰ The basis for this was discussed in the Generalizability section. It includes: 1) a Mesopotamia map drawn as a circle; 2) Romans coins in which a globe can represent the earth, the celestial heavens, or authority. M.R Molnar, "Symbolism of the Sphere," *The Chelator* (June 1998). As well, the Hellenistic statue of Atlas demonstrated the spherical nature of the heavens. Geometry was available by Thales 6th century B.C. (see Wikipedia online- Geometry). And in Is. 40:22 it is stated that God sits above the arch of the earth. Isaiah lived about 740-680 BC.

⁶⁴¹ See 1Peter 3:18-21.

⁶⁴² See footnotes in Determinancy section for ark.

⁶⁴³ See Generalizability see for a discussion on the structure of the ark.

⁶⁴⁴ NIDOTTE (H6770, Strong 6086, SK 6770) “עֵץ (‘ēṣ), nom. wood, tree ... עֵץ is a common Sem. root for trees, wood, lumber, timber, sticks, etc. It is used in Akk. *iṣur*; Ugar. ‘ṣ; and in Phoen. Eth. ‘eḏ (cf. OSA ‘ḏ). It appears as עֵץ in Aram. (cf. Egypt. Aram. עֵץ), because of dissimulation. The original root is uncertain.”

⁶⁴⁵ Woodmorappe, J., 1996 fifth printing 2003, on page 51 commented regarding the composition of *gopher* wood, “This Author commented on the nature of the wood used in the ark, ‘The identity of the

pitch, a known compound from early times (**Figure 5**).⁶⁴⁶ Some have considered bitumen the source of pitch. Raw crude petroleum can to this day be found oozing from the ground in a variety of areas of the Dead Sea but is probably post-Flood in origin—a product of the degradation of massive amounts of plant life deposited during the Flood.⁶⁴⁷ Yet, some have argued that pre-flood bitumen may have been from an inorganic source rather than an organic source.⁶⁴⁸ In conversation with Dr. Snelling, he considered this not possible. The fact that both Moses' container and the ark use the same word however argues for a similarity in composition or function. Nonetheless the function of sealing the woody structured boat to make it water tight is descriptive and it remains a part of boat construction to this day. These words are very descriptive of a true functioning floating vessel.

gopher wood used to construct the Ark (Gen. 6:14) remains a mystery (Wright 1985, p. 367), although some commentators have suggested that 'gopher' is not a type of tree, but a process which makes wood very hard. But what kind of wood was the Ark made of? Indian teak has been found by archeologists in ancient Babylon (3000 BC: Edwardes 1923, p. 165), so it had been known to the peoples immediately after the Flood, and by implication, also to the antediluvians. Because of its strength and durability, teak is probably the best wood of all for the construction of ships (Barbour 1870; Edwardes 1923). Teak structures have resisted deterioration for thousands of years (Edwardes 1923, p. 166), and the possible survival of the Ark in Ararat to this day may be due to this fact. Moreover, the Chinese practice a method of burying teak underground in order to make it even harder (Hughes 1989, p.166), and Noah may have also employed this technique. Some trees presently confined to India are half-again stronger than teak (Sekkar and Gulati 1988, p.8). Other woods, such as locust, mahogany, and tonquin, are also very strong (Barlow 1832; Hawell 1860), and could have been used to build the ark.”

⁶⁴⁶ See section on Determinancy on wood and pitch.

⁶⁴⁷ On page 217 the comments are made, "The minerals in the Dead Sea include the chlorides of sodium (salt), magnesium, potassium, calcium, and magnesium. The presence of bituminous material in the sea has been known since ancient times. These lumps of bitumin, found floating on the surface, provide evidence of petroleum springs in the sea bed." Packer, J. I. and M.C. Tenney, *Illustrated Manners and Customs of the Bible* (Nashville, TN: Thomas Nelson Publishers, 1980), 217.

⁶⁴⁸ This author noted that H. Morris showed in 1976 that the word translated bitumen did not necessarily need to be a petroleum product, see next reference. But he, Woodmorappe, went on to argue as well, "Gold (1987) has presented an intriguing theory that oil is abiogenic, and comes from the earth's mantle. The evidence of biologic activity in oil can be explained as a later contaminant (Gold 1992). Even if his theory is incorrect with respect to the majority of the earth's petroleum, some petroleum still must have originated abiotically from the mantle, as demonstrated by a wide variety of evidences (Gold 1897, pp.10-11; Sugisaki and Mimura 1994)." J. Woodmorappe, *Noah's Ark A Feasibility Study* (Santee, CA: Institute for Creation Research, 1996, second printing 2003), 51.

There are some who have tried to compare Noah's Ark to the reed boats of the Mesopotamians. The ark was not composed of reedy material.⁶⁴⁹ Another author tried to assign it to a river barge such as floated on the Mesopotamian River.^{650, 651} This boat was much too small, as were others of the time (**Figure 6a-f**), and the ark was a very big boat by ancient and even current standards (**Figure 7**) for relative boat sizes. Finally, the boat of the Mesopotamian flood story was shaped like a box—and thus was very unseaworthy (**Figure 8**).^{652, 653} Thus this scenario is pure conjecture, riveted to the belief in a local flood, and the Biblical flood being a derivative of the Sumerian one. The compass of this present writing I believe argues strongly against what these proponents propose, and they do harm to the scriptures.⁶⁵⁴

⁶⁴⁹ See Determinancy section for a definition of gopher wood.

⁶⁵⁰ R.M Best, *Noah's Ark and Ziusudra Epic* (Fort Meyers, FL: Enlil Press, 1999).

⁶⁵¹ There are clay plaques found in the early Babylonian Period (approximately 1900 BC) that depict reed barges. See David Hendin Amphora Coins@aol.com Catalogue 94 item 458. Two men are in a reed barge that is about 10-12 feet long. They are maneuvering it with poles. It is an open structure. Even Egyptian barges do not match the dimensions of the Noah Ark. They tended to be much smaller and narrow, with an open deck. See J.B. Pritchard (1958) *The Ancient Near East Vol.1*, Princeton University Press. Picture 21 caption says, "Wooden model of a boat equipped with rudder, mast, sail, and cabin... Eleventh Dynasty." It had sails and rudder in contrast to the Noah Ark.

⁶⁵² In the Gilgamesh Epic it is 120 cubits high and 120 cubits in length. A.Clay (1922) *A Hebrew Deluge Story in Cuneiform*, Yale University Press, New Haven. Pg.75.

⁶⁵³ Heidel rendered tablet 11:54-68, "The child [brou]ght pitch (While) the strong brought [whatever else] was needful. On the fifth day [I] laid its framework. One iku was its floor space, one hundred and twenty cubits each was the height of its wall; One hundred and twenty cubits measured each side of its deck. I 'laid the shape' of the outside (and) fashioned it. Six (lower) decks I built into it, (Thus) dividing (it) into seven (stories). Its ground plan I divided into nine (sections). I drove water-stoppers into it. I provided punting-poles and stored up a supply. Six shar of pitch I poured into the furnance, (And) three shar of asphalt [I poured] into it." He noted that one *iku* was about the size of an acre and that a *shar* was possibly 8,000 gallons. Heidel, A, *The Gilgamesh Epic and Old Testament Parallels* (Chicago: Phoenix Books, 1967 6th edition), 82-3.

⁶⁵⁴ Mr. Best in his section on conclusions gives "confidence levels" for: 1) "The ancient flood stories are mostly myth-100%"; 2) "no one ever lived to 900 years old-100%"; 3) "There was no global flood a few thousand years ago-100%"; 4) "A storm caused a Euphrates River flood about 2900 BC- 95%"; 5) "The historic flood of about 2900 BC was the basis for Noah's flood story-90%"; 6) "Noah was a real person-50% or Noah was a fictitious person-50%"; 7) "Noah's ark did not land on a mountain-100%"; 8) "There were many more than ten survivors of Noah's flood-100%"; 10) "The river carried Noah's barge into the Persian Gulf-90%"; 11) "Story tellers confused the deep Gulf with a flood-80%"; 12) "the barge drifted for several months in the Gulf-70%"; 13) "Story tellers mistranslated hill or country as mountain-90%"; 14) "and the barge grounded near the shore of the Persian Gulf-90%". Sadly, he simply discredits the straightforward reading of the Genesis flood account. Best, R.M. *Noah's and the Ziusudra Epic* (Fort Meyers, FL: Enlil Press, 1999).

There is a mention of the drawings of ships on metal blades that appear very similar to Phoenician ones found in the area of Dorak Turkey from about the 3rd Millennium B.C.⁶⁵⁵ This artwork would be supportive of technologically advanced ship design from very early times, and not just simple reed boats.

That the ark was also a type of salvation is well documented both by the fact that its term was used for both Noah's boat and Moses' basket. The writers of the New Testament and early Church Fathers also viewed it that way.^{656, 657, 658} This does not diminish the reality of it as a real vessel.

⁶⁵⁵ Wilson, I. (2001) On page 162 there is a diagram on two silver swords of several boats with elongated hulls, protruding bows, sweep up sterns, rectangular sails, and oars. On page 152 he quotes J. Mellaart, "Certainly the earliest detailed representation of oceangoing ships yet known outside Egypt." Yet, Wilson is a supporter of the Black Sea Flood scenario. The significance of the etchings is that if dated correctly they reveal very sophisticated vessels very early on in the history of mankind. [The concept of the 3rd millennium being assessed by certain assumptions is not necessarily accepted by this author.]

⁶⁵⁶ KJV Matthew 24:36-39 "But of that day and hour knoweth no man, no, not even the angels of heaven, but my Father only. But as the days of Noe were, so shall also the coming of the Son of man be. For as in the days that were before the flood they were eating and drinking, marrying and giving in marriage, until the day that Noe entered into the ark, and knew not until the flood came and took them all away; so shall also the coming of the Son of man be." See also Determinancy section.

⁶⁵⁷ Augustine commented, "The meaning must be that the ark of Noah is a picture of the church, and so those who were imprisoned in his days represent the entire human race. In hell Christ rebuked the wicked and consoled the good, so that some believed to their salvation and others disbelieved to their damnation. Letter 164." G. Bray, ed., *Ancient Christian Commentary on Scripture*, vol. 11, *James, 1-2 Peter, 1-3 John, Jude* (Downers Grove: InterVarsity Press, 2000), 109.

⁶⁵⁸ This author commented on page 193, "To Noah, therefore, God communicated his awful design of punishing the rebellious; to him directions were given for the construction of a vessel, which should effectually resist the disruption of 'the fountains of the great deep', and the overwhelming violence of the torrents from heaven; with him the Deity vouchsafed to hold while the ark was preparing;...and in his personal safety and mental tranquility, the mercy of his God was eminently displayed, when the 'windows of heaven' were actually opened, and the waters prevailed till all things under heaven were covered." On page 194 he imagined what the event must have been like, "Here pause, my fellow sinners, and survey with becoming solemnity, the justice and mercy of the God of heaven. Would you witness a display of his justice, behold the terror and dismay painted on every countenance, while the rapidly increasing flood drives an ungodly race from their habitations, follows them to the adjacent hills, and overtakes them on the loftiest mountains....Listen to the agonizing shrieks of the devoted victims; view the floating cor(p)ses of millions, dying wretches stretch out their arms towards the ark, which had long been the object of their contempt or derision; and behold them final sink into one undistinguished ruin:-and you will be constrained to confess that 'it is a fearful thing to fall into the hands of the living God.' Then direct your attention to the select and highly favoured few whom Jehovah himself hath "shut in;" witness the security of their dwelling, the serenity of their minds, and the importance and grand design of their preservation; and, while thunders roll above, and the terrific billows foam and roar beneath and around the ark, you will be constrained to say of Noah's covenant God, 'his mercy endureth forever!'" (Psalm 136:1) On page 195 he concludes, "The ark

3. Noah

That Noah was a real man is well documented. As mentioned earlier he is listed in a genealogy, had a wife, and was a father of specific people e.g. Shem, Ham, and Japheth. He built a boat. Numerous references were made of him, as a person, by many Old and New Testament writers.⁶⁵⁹ He was human and thus sinful—he got drunk (considered a sin in the Bible for as Paul says be not drunk but filled with the Spirit, and Proverbs says those who are perishing get drunk).⁶⁶⁰ As well he died as humans do.⁶⁶¹

Some will argue that we have no physical description of him. But often histories leave out the actual appearance of key players. In William Bradford's *History of Plymouth Colony* I do not recall the physical description of Bradford, Brewster, Robinson, Standish, or others being detailed. In fact, rarely in the Old or New Testament is anything said of the physical attributes of the prophets, kings, or even Jesus Christ.

It appears that many of the great church fathers accepted the idea of a real Noah: Jerome in calculating the time of death of Methuselah and the onset of the flood (which he believed occurred in the same year) referred to the birth of Noah. Chrysostom stated,

alluded to may be considered as a striking type of the Lord Jesus Christ: as it was divinely appointed, admirably constructed, generally despised and appreciated only by those persons for whose preservation it was originally intended. Also as it was the only asylum from the wrath of God, and the pains of death." He goes on with a comparison of the ark with Jesus Christ: 1) the ark was made of incorruptible wood, Christ was incorruptible; 2) the ark was large, Christ atoning death is available to save mankind from every race and nation; 3) the ark was pitched within and without so as to be impenetrable by the waters, so Christ resisted sin from within and without; 4) the ark was despised, was Christ despised and rejected etc.. Smith clearly acknowledged the reality of a real ark, the effects of the flood, as well as the symbolism it represented regarding salvation through Jesus Christ.

Rev. T. Smith, *Lectures on Subjects taken from the History of the Old Testament* (London: Williams and Son, 1813), 179-213.

⁶⁵⁹ Gen. 5:29 Noah son of Lamech; Gen. 5:32 Noah had sons; Eze. 14:14 Noah included with Daniel and Job as real persons; Heb. 11:7 Noah was warned by God; 1Pet. 3:20 Noah was saved along with 7 others.

⁶⁶⁰ Gen. 9:21.

⁶⁶¹ Gen.9:29.

“Noah’s virtue shines through the widespread corruption of his times...;” and Augustine commented, “Noah was perfect as far as citizens of the city of God can be perfect during their pilgrimage of this present life.”⁶⁶² Adam Clarke, in the 1700’s AD, commented that “Noah, who built the ark for the preservation of the human race, and who seems to have been a typical person;”⁶⁶³ Yet, as Henry Morris lamented in 1976, “To the majority of modern intellectuals, Noah is merely a legendary character and his Ark and its animals nothing but a story for children’s coloring books. That the entire account is sober and important history is a concept too naive even to consider, so they seem to think.”⁶⁶⁴ He then quoted the Apostle Peter and Jesus Christ who stated in Matthew 24:37-39 that as in the days of Noah so will it be when the Son of Man returns. Just as there had been a real flood there will be a real return of Jesus Christ. Yet, people will choose to ignore God’s warning to repent until it is too late. And as His return will encompass the earth,⁶⁶⁵ so too was the flood all encompassing of the earth.

It is to be recognized as well that the name of Noah was symbolic.⁶⁶⁶ It means peace or rest⁶⁶⁷, but in verse 6:8 it says he found grace⁶⁶⁸ in the eyes of the Lord. Grace in Hebrew is *hen* or the consonants *hn*, the reverse of *nh*.⁶⁶⁹ This is not uncommon, as

⁶⁶² A. Louth, ed., *Ancient Christian Commentary on Scripture*, vol. 1, *Genesis 1-11* (Downer, IL, 2001) 121,128-9.

⁶⁶³ A. Clarke, *Adam Clarke's Commentary on the Bible* (Grand Rapids, MI: Baker House, 1826, reprint 1967), 27.

⁶⁶⁴ H. Morris, *The Genesis Record* (Grand Rapids, MI: Baker House, 1976, 5th printing May 1980), 178.

⁶⁶⁵ See Matthew 24:29-31 and 38-39.

⁶⁶⁶ Alter comments on Gen.5:29, “This one will console us. As usual, the sound-play on the name Noah, which lacks the final mem of the word for ‘console,’ *nahem*, is loose phonetic association.” R. Alter, *The Five Books of Moses* (New York: W.W. Norton, 2004), 36.

⁶⁶⁷ NIDDOTE “נַחַם (nōah), place of rest (H5695).”

⁶⁶⁸ NIDDOTE “חֵן (hēn I), grace, favor, charm (H2834).”

⁶⁶⁹ T. Longman 3rd and D.E. Garland, eds., *The Expositor's Bible Commentary Revised Edition, Genesis-Leviticus* (Grand Rapids, MI: Zondervon Publishing, 2008), 118.

names are meant to portray a characteristic of the so-named person in the ancient Jewish culture as well as in other cultures of the world even into modern times.⁶⁷⁰

A Noah-like figure is represented as a specific person in many other cultures around the world. In the India story it is Manu, in China it is Yu, and in Canada among the Ojibway it is Menaboshu etc. In most stories he has the human characteristics of having a family and together they repopulate the earth after the flood.⁶⁷¹

Thus, it is well documented that Noah was a real tangible person, who struggled with the issues of sin and man's rebellion against God. The story of a Noah like figure is present in every culture of the world (as was documented in the section on anthropology in the section on Generalizability). His name was also ordained to have meanings that God wished to relay to man. He reflected God's "grace" towards man and the "rest" and protection from destruction afforded to man as he trusted in and obeyed God.

4. Toledot (generations)

The toledot is very characteristic of Jewish literature in contrast to that of later Western writing.⁶⁷² It reflects the very basic human activity of procreation and of God's commands and promises regarding this. Some feel it reflects the confirmation of God's promise upon Abraham to Jacob that brings blessings to the world through them.^{673, 674}

⁶⁷⁰ Esau means "hairy or shaggy" consistent with his general appearance. As well, this reflected him as a man of nature-a hunter. J. Comay et al., *Who's Who in the Bible* (New York: Wings Books, 1971), 118-9.

⁶⁷¹ A. Custance, "Flood Traditions of the World," in *Symposium on Creation Vol.4*, (Grand Rapids, MI: Baker House, 1972), 9-44.

⁶⁷² Alter, *The Five Books of Moses*, 34. He states, "Nothing reveals the difference of the biblical conception of literature from later Western ones more strikingly than the biblical use of genealogies as an intrinsic element of literary structure. As J.P. Fokkelman (1987) has noted, the genealogical lists or 'begats' (toledot) in Genesis are carefully placed compositional units that mark off one large narrative segment from another: ...the begetting of the genealogical lists are linked thematically with the initial injunction to be fruitful and multiply and with all the subsequent stories of a threatened or thwarted procreative drive."

⁶⁷³ See footnotes in Determinancy Section on Toledot.

When used in context with Noah it reveals him as a very real person, and of God's covenant relationship with him. It is derived from an ancient Semitic term⁶⁷⁵ and thus supports the contention that the account is an ancient one. The writer of Genesis put great emphasis on the use of it, and some feel that it was used to demarcate sections, or even was the colophon left from the collation of scripts or tablets.⁶⁷⁶

5. Hills and Mountains

The word more commonly use for mountain is *har*, and that for hill *gibah*. Both have been consistently identified as ground surfaces throughout the OT. *Har* has an association with both Ugartic and Phoenician cognates.⁶⁷⁷ *Gibah* also has a cognate with Assyrian.⁶⁷⁸ Thus these common words regarding the physical earth have association with other ancient languages. While this does not prove the antiquity of the

⁶⁷⁴ NIDOTTE, “תּוֹלְדוֹת” comes from the vb. יָלַד, father, give birth to, bear. As such, it refers to that which is born or produced. The expression ‘these are the generations of’ points to the progenitor and the progeny. In six of these instances, the focus is on one major figure character (as opposed to lesser ones) in the drama of biblical revelation: (i) the generations of the heavens and the earth—Adam/Eve; (ii) the generations of Noah-Shem; (iii) the generations of Shem-Terah; (iv) The generations of Terah-Abraham; (v) the generations of Isaac-Jacob; (vi) the generations of Jacob-Joseph. Five times this phrase ‘these are the generations of’ occurs in [Gen 2:4 to 11:26](#), i.e., from the time of creation to Abraham. It appears 5x from [11:27 to 50:26](#), i.e., from Abraham's departure from Ur/Haran until Israel's sojourn in Egypt. The positioning of Abraham in the midpoint of this series of movements in redemptive history highlights his pivotal role in human history. It is in Abraham and in his descendants that the nations of the earth find blessing in Yahweh. Far from Genesis being a patchwork of unorganized materials, the ‘generations’ formula, pervasive throughout Genesis, ‘transforms historical data, names, narratives, genealogies, and human developments into a coherent framework for understanding the world’ (VanGemenen, *Progress*, 76).”

⁶⁷⁵ NIDOTTE, “יָלַד” (yālad), q. bear, bring forth, beget. ANE Akk. *walādu* (CAD 1:287-94).”

⁶⁷⁶ Wilson has referred to Commodore Wiseman stating that Genesis was originally written on tablets. He noted that the writer's name appeared at the end of the segment, or tablet, and not the beginning. As well, he considered Moses to have compiled these documents. Wilson, C, *The World's Most Famous Book*, ed., *Recovered Documents and the Bible* (Melbourne: pre-publication copy, 1983), 97-8.

⁶⁷⁷ NIDOTTE, “הַר” (har), nom. mountain, hill (H2215). ANE The nom. is confined almost entirely to Heb., and cognate words are rare. The following forms occur occasionally in Northwest Semitic: Ugar. *hr*, EA *harrī*, and Phoen. and Punic *hr*.”

⁶⁷⁸ NIDOTTE, “גִּבְעָה” (gib‘â I), nom. hill, height (H1496). ANE Also in Middle Hebrew and Jewish Aramaic, and cognate with the rare Assy. term *gab’u*, height.”

text, it does prove that words derived from early languages are used in the Noah Flood text. As well, what *har* referred to prior to the flood is not necessarily the same sort of geological structure as that seen afterwards. It can mean a low convex or high rising structure (**Figure 9**).

B. Verbs and Adjectives: All, Upon, Prevailed, Receded, Exceedingly, Covered

The adjectives and verbs used in the Noah account give an important impression of the extent and magnitude of the flood:

The word for “**all**” כֹּל (kōl), means “the whole of something,” and can represent the “absolute state,”⁶⁷⁹ i.e. that every mountain was covered and every life died (outside) the partial. It is used in Gen. 6:17 regarding God’s judgment, “to destroy **all** life under the heavens”, and in Gen. 6:12 regarding the sinfulness of mankind, “for **all** the people on earth had corrupted”. It is also used during the creation event in Gen. 1:31, “and God saw **all** that He had made,” and of God’s sovereignty in Psalm 47:7, “For God is the King of **all** the earth....”⁶⁸⁰ There is little indication that it meant something partial like so many of the modern commentators try to make it mean, i.e. in support of a local flood event. From the viewpoint of the writer it was not just local for he would have been able to use other language to more accurately express this. A good example of this is the partial inundation of land to destroy Pharaoh’s army and to save the children of Israel.⁶⁸¹

⁶⁷⁹ NIDOTTE “(H3972). כֹּל (kōl), the whole, all, every.”

⁶⁸⁰ It can represent a subset of a larger group, but it is “all” of the subset, i.e. in Gen. 7:1 the Bible says, “and the Lord said unto Noah, Come thou and all thy house into the ark”. This did not include all of mankind but did include all of Noah’s family. But clearly if God is the King of **all** the earth, then He can flood **all** the earth in judgment.

⁶⁸¹ Exodus 14:23-31 describes the drowning of Pharaoh’s army, “all the host of Pharaoh that pursued them; not even one of them remained.” (Amplified Bible) Yet it goes on to say in verse 29, “But the Israelites walked on dry ground in the midst of the sea, the waters being a wall to them on their right hand and on their left. Thus the Lord saved Israel that day from the hand of the Egyptians.”

Upon (NASB) or **on** (NIV):⁶⁸² is another peculiar word. In Genesis 7:10, 17, 18 the waters were “upon” the earth. It has an expression of universality or totality in Genesis Chapter 6.⁶⁸³

Prevail:⁶⁸⁴ Means to be of superior strength. The waters prevailed against the earth. In Gen.7:19 it is coupled with “exceedingly,”⁶⁸⁵ and “upon”. It says (KJV) “And the waters prevailed exceedingly upon the earth....” The waters overcame and were above (looking down on) the earth.^{686,687}

⁶⁸² WSOT (Strong 5921, 5922) means, “above, over, upon, or against (yet always in this last relation with a downward aspect).”

⁶⁸³ NIDOTTE (see adamah1 [H141]), “The expression (**upon**) the face of the earth (פְּנֵי הָאָרֶץ) (עַל) (34x) can signify an area as small as a battlefield (Jer 8:2; 16:4; 25:33) or the entire surface of the earth (Gen 2:6; 8:8, 13; Ps 104:30). On a number of occasions, the biblical spokesman mentions the entire surface of the earth as the vast region from which a condemned people is removed (Noahic flood—Gen 6:7; 7:4, 23; other divine judgments—Exod 32:12; 1 Sam 20:15; 2 Sam 14:7; 1 Kgs 9:7; 13:34; Jer 28:16; Amos 9:8; Zeph 1:2-3).” The other references such as Exod. 32:12 have a sense of totality, and if not then a qualifier is added as in Amos 9:8.

⁶⁸⁴ NIDOTTE (H1504) “גָּבַר (*gābar*), q. be strong, accomplish, excel, swell, rise, prevail be superior;...ANE The root גָּבַר is found in most of the Sem. languages (Kosmala, *TDOT* 2:367). In all occurrences save for Eth. (where it means do, make), the emphasis lies on power and strength and often on excellence and superiority as well (Kosmala, *TDOT* 2:367). In Akk. *gab / pāru* occurs with the meaning overcome, subdue, vanquish, conquer, subjugate, overpower, overwhelm; vie/contend with. The Arab. *gābara* V means behave/conduct/deport oneself with strength. The Arab. *gābbār* means all-powerful.”

⁶⁸⁵ NIDOTTE (H4394) “מְאֹד (*mē’ōd*), nom. power, might; adv. very, much, greatly, exceedingly, thoroughly. ANE Cognate forms are found in Sam. *m’d*; Ugar. *m’d, m3 d, m3’d*; and Akk. *ma’du, mfdu* (adj., much, many).” In Gen. 1:31 it is used in the context of God’s creation “behold, it was very [exceedingly] good”, and in Ex.1:7 regarding the children of Israel “waxed exceedingly mighty”.

⁶⁸⁶ Dr. Snelling commented, "The phrase '15 cubits upward did the waters prevail' does not mean that the Flood was only 15 cubits (22 feet) deep, for the phrase is qualified by the one which immediately follows: 'And the mountains were covered.' Nor does this phrase necessarily mean that the mountains were covered to a depth of only 15 cubits, because this would require that all pre-Flood mountains had exactly the same altitude. The true meaning of this depth of water is very clear when we refer back to Genesis 6:15, where we are told that the height of the Ark was 30 cubits. Most commentators agree that the '15 cubits' in Genesis 7:20 must therefore refer to the draft of the Ark, which must have sunk into the water to a depth of 15 cubits (just one-half of its total height) when fully loaded. This information adds further support to the depth of water argument for a global flood because it tells us that the Flood waters 'prevailed' over the tops of the highest mountains to a depth of at least 15 cubits (22 feet)." Snelling, A, *Earth's Catastrophic Past*, (Dallas, TX: Institute for Creation Research, 2009), Volume 1, 28. H. Morris and J. Whitcomb had made a similar comment in their book on the Genesis Flood in 1961.

Exceedingly:⁶⁸⁸ The term is used in Genesis regarding the flood that it “rose greatly on the earth.”

Covered: Covered:^{689, 690} “כָּסָה (*kāsā*), q. cover, conceal.” It means to overwhelm something. It is used in reference to the mountains whereas “upon” is used in reference to the whole earth. The waters overwhelmed the mountains, and the low lands were covered. But it is important to remember that the mountains or hills in the early flood period were not necessarily similar to current ones.

Receded:⁶⁹¹ At a given time the waters began to recede from what would become the new continents. To some Hebrew scholars there is a sense of the waters ebbing and

⁶⁸⁷ Dr. Snelling quoted two other scholars regarding the concept of the waters prevailing or overcoming the earth. On page 29 of Volume 1 of his work *Earth's Catastrophic Past* he stated, “First Wendam says of Genesis 7:18-19 that ‘the waters do not merely multiply greatly; they triumph,’ as in the victory in a military battle. He further comments: ‘Note the repetition of the key words, and the way the remark ‘the waters triumphed and multiplied greatly’ in v. 18 is heightened here to ‘the waters triumphed exceedingly [greatly greatly].’ Just how deep the water was is indicated by the high mountains being submerged.’ Then Cassuto says of Genesis 7:24: ‘[T]he paragraph closes, with an awe-inspiring picture of the mighty waters covering the entire earth. We see water everywhere, as though the world had reverted to its primeval state at the dawn of creation, when the waters of the deep submerged everything. Nothing remained of the teeming life that had burst forth upon the earth.’”

⁶⁸⁸ NIDOTTE: “מְאֹד (*m'ōd*), nom. power, might; adv. very, much, greatly, **exceedingly**, thoroughly. ANE Cognate forms are found in Sam. *m'd*; Ugar. *m'd*, *m3 d*, *m3'd*; and Akk. *ma'du*, *mfdū* (adj., much, many).” It is used as an attribute of God when He created the heavens and the earth and it was “very good.” In reference to mankind Cain became “very angry,” and Abraham became “very wealthy.”

⁶⁸⁹ WCOT (Strong 3680) KACAH: “to plump, i.e. fill up hollows,... to cover...overwhelm.”

⁶⁹⁰ NIDOTTE “(H4059) כָּסָה (*kāsā*), q. cover, conceal....ANE The Ugar. *kisy* (*UT*, n. 1279) carries the sense of cover, cover up. The same sense is borne by the Arab. *ksw* and the Akk. *kas*. OT 1. The semantic domain of cover includes several terms, of which the most important is כָּסָה. Significant theological themes related to cover, include the covering of sins (כָּסָה)...”

⁶⁹¹ NIDOTTE (H7725) “The turning point of the story is 8:1: “God remembered Noah ... and he sent a wind over the earth, and the waters **receded**.” Here the heaven-sent wind echoes the wind of God hovering over the waters before the first act of creation. And, as in **Gen 1**, there follows the progressive separation of water from the land: first the mountain tops appear, then the fresh growth of the trees, and eventually the earth was dried out.”

flowing as they left what would become dry ground.⁶⁹² This would have an impact on the appearance of the earth post-flood (See geology section on Generalizability). As had been discussed in the section on Connectedness the processes of rising and receding flood waters lends veracity to the story as to the physical properties of water; and the ark landing on top of the mountains of Ararat, not a hill by the identification given to us in ancient history, lends support to it having been a massive flood.

Sub-conclusion: When the adjectives, adverbs, and verbs of the flooding of the earth are combined, there occurs a profound description of the magnitude of the events from Genesis 7:17-20:

Verse 17; “and the waters **increased**, and bore up the ark, and it was lifted up **above** the earth.”

Verse 18; “and the waters **prevailed...were increased** upon the earth...the ark went **upon** the face of the waters.”

Verse 19; “and the waters **prevailed exceedingly upon** the earth... **all** the high hills,... under the whole heaven, were **covered**.”

Verse 20; “Fifteen cubits upward did the waters **prevail... mountains [hills] covered**.”⁶⁹³

C. Sub-Conclusion on Discussion Regarding Determinancy

The Bible uses some unique terms to describe the Noah Flood Account. The term for flood is found in only Genesis and one other place in the Bible and refers to “The Flood”.⁶⁹⁴ The context into which it is put confers a sense of universality or totality. Genesis 7:18(KJV) states “And the waters prevailed, and were increased greatly upon the

⁶⁹² Barrick states on page 252, "The Hebrew grammar of Genesis 8:3, I will submit, supports a large-scale, back and forth, circulating motion that could have had profound effects in shaping the new landscape." His rendering of Genesis 8:3, on page 265 reads, "Then the waters were turning back from upon the earth, going and returning, *little by little* so that they continued to decrease **at the end of those 150 days...**" In this view he echoes Kirby in his Bridgewater treatise of 1835. Mortenson, T. and T.H. Ury, eds., *Coming To Grips With Genesis* (Green Forest, AR: Master Books, 2008), 252 and 265.

⁶⁹³ NIDOTTE “(H2215) הַר (har), nom. mountain, **hill** (H2215). 19 They rose greatly on the earth, and all the high **mountains** under the entire heavens were covered. ²⁰ The waters rose and covered the **mountains** to a depth of more than twenty feet.”

⁶⁹⁴ Psalm 29:10 describes God sitting above the flood.

earth; and the ark went upon the face of the waters. And the waters prevailed exceedingly upon the earth; and all the high hills, that were under the whole heaven, were covered.”

The term for ark is only found here and for the vessel that Moses was preserved in. Thus, it has religious symbolism attached to it as well as being a literal floating structure. That it was a real vessel is demonstrated by the fact that specific dimensions were given for it, Noah entered it, and it floated.

Yet, there are many common words that describe animate objects such as cattle, mountains, flesh etc. Many of these words appear to be derived from ancient Ugaritic, Semitic, or other roots. The common words that have been used in it would have been identifiable items to the people of the time. This lent (and lends) credibility to the story and its antiquity.

The Noah Flood Account used unique words to emphasize the one- time event, as well as it used other common words that allowed it to be easily understood, and many of the words used have an association with other ancient language words. These words are of an ancient derivation, and support the idea that the Noah Flood Account is an ancient product. As well, the language is most clearly understood to indicate a massive flood, nothing like it had happened before or after. All hills were covered and all life with the “breathe of life” died outside the ark. The ark, a large boat, landed on the top of the mountains, as the flood subsided—not where a boat usually lands. Thus, the criteria for Determinancy regarding the Noah flood account are fulfilled as a TNR.

CONNECTEDNESS

One of the central issues surrounding the authenticity of the Noah flood account as a TNR is that of the authorship of the account and the transmission of it through time. It would be expected that if there was one author and it was recorded while he was alive it should reflect this by its homogenous continuity (connectedness) of structure. If it, as we presently have it, was composed by several authors, redacted, and finally written down after hundreds of years of oral tradition it should reflect a more fragmented composition. Moses has traditionally been accorded the authorship of Genesis, by Jewish authorities, and other conservative scholars (**Figure 10**).⁶⁹⁵ There are several reasons for this:

A. Moses is identified with writing the Book of the Law.

In Deuteronomy 31:24-26 it says, “After Moses finished **writing**⁶⁹⁶ in a **book** the **words** of this **law** from beginning to end, he gave this commandment to the Levites who carried the ark of the covenant of the Lord: ‘Take this **Book of the Law** and place it beside the ark of the covenant of the Lord your God.’” This scripture states that Moses wrote a book, it contained all (from the beginning to the end) of the Law, and he gave it to the Levites- while he was alive. The Hebrew word is *cephar*⁶⁹⁷ and is used for the word book and is used in the context of a “writing, a letter, a document, a bill, a register: a book, a scroll.” It refers to “important legal documents.”⁶⁹⁸ Ezra 3:2 also says, “Then

⁶⁹⁵ *The Expositor's Bible Commentary Genesis-Leviticus* (2008) 23.

⁶⁹⁶ NIDOTTE: “כָּתַב (kātab), **writing** (H4180).” This same word is found in “Jos 18:8 As the men started on their way to **map out** the land, Joshua instructed them, ‘Go and make a survey of the land and **write a description** of it.’” The term is also used in “1Ki 15:23 As for all the other events of Asa's reign, all his achievements, all he did and the cities he built, **are** they not **written** in the book of the annals of the kings of Judah?”

⁶⁹⁷ Strong's #5612. “Cephar prop. Writing (the art or a document); by impl. A book: -bill, book, evidence, X learn(-ed) (-ing), letter, register, scroll.” NIDOTTE “סֵפֶר (sēper I), written document (H6219)”

⁶⁹⁸ NIDOTTE: “**Law of God** (תּוֹרָה [tôrâ], nom. direction, instruction, **law**, the **law**, H9368)... The various ways in which תּוֹרָה is used in the titles given to Deuteronomy are: “**Law**” (Deut 1:5; 4:8, 44; 17:18, 19; 27:3, 8, 26; 28:58; 29:29 [28]; 31:12; 32:46; 31:11; Josh 1:7; 22:5; 2 Kgs 17:13 [?]; 23:24 [pl., 17:34, 37]); “**Book of the Law**” (Deut 28:61; 29:21 [20]; 30:10; 31:26; Josh 1:8; 8:34; 2 Kgs 22:8); “**Book of the Law** of Moses” (Josh 8:31; 23:6; 2 Kgs 14:6); “**Law** of Moses” (Josh 8:32; 1 Kgs 2:3; 2

Jeshua son of Zerubbabel son of Shealtiel and his associates began to build an altar of the God of Israel to sacrifice burnt offerings on it, in accordance with what is written in the **Law of Moses** the man of God.” The books of Exodus, Leviticus, and Numbers all have written components of the Law in them. Even Genesis has elements of the law as it reveals the basis of the law in the covenants of God with Adam, Noah, Abraham and his offspring. In Joshua it stated that he “made a covenant for the people, and there at Schecham he drew up for them decrees and laws. And Joshua recorded these things in the Book of the Law of God.” (Joshua 24:25-6) This is important because scripture itself placed the writing of the law, physically, at the time of Moses. The writing of the Ten Commandments by the finger of God on stone affirms the writing of the law, and **the presence of a written language**. Current archeology has supported the exodus to either the 15th century or 13th century B.C. The recent find of a silver scroll (**Figure 11a**)⁶⁹⁹ lends physical documentation to the scriptures presence **before** the Babylonian exile. The inscription from Hezekiah’s tunnel supports this as well (**Figure 11b**). Bullae and stamped jar handles (LMLK) that have paleo-Hebrew letters (**Figure 11c, d**) during the same time period also support the idea that Jewish leaders had the writings of Moses before the time of Ezra. The plaster inscription that mentions Balaam is further support for this view (**Figure 11e**). It is probable, even from secular documents, that the writings of Moses were available and did occur in written form from the time of the exodus. Proto-Canaanite texts are known in the 17th century B.C.,⁷⁰⁰ and ones from Egypt may extend back to 3000 B.C. (by secular time).⁷⁰¹ This is important because some have argued that the law of the Jews was only transmitted orally till the time of Ezra.⁷⁰²

[Kgs 23:25](#)); “Book of the **Law** of God” ([Josh 24:26](#)); “**Law** of the LORD” ([2 Kgs 10:31](#) [see also [Ps 1:2](#)]).

⁶⁹⁹ The scroll is dated at about 700 B.C. A.J Hoerth, *Archeology and the Old Testament* (Grand Rapids, MI: Baker Books, 1998), 386.

⁷⁰⁰ J. Naveh, *Origins of the Alphabets* (Jerusalem: Palphot, 1976), 17.

⁷⁰¹ "Egyptian Tomb Inscription May Bear Oldest Proto-Hebrew Text Yet," *Fox News*, January 25 2007, <http://www.goxnews.com/printer-friendly-story/0,3566,246379,00.html>.

⁷⁰² See comments on Wellhausen.

B. Moses was in a natural position to write regarding the history of Israel, as seen in much of Genesis, Exodus, and Deuteronomy. He was trained in the Pharaoh's court, had an interest in and was taught the things of the Hebrews, for even as a child he was given back by Pharaoh's daughter for his family to raise him. This occurred long before he struck the Egyptian.⁷⁰³ He would have had access to court documents- of which Egypt had extensively compiled, including much communication with other distant nations. The finding of the Adapa creation tablet at Armana^{704,705} supports the idea that Moses did have ancient writings or documents regarding the creation, and by association the flood, available to him as a Prince of Egypt.⁷⁰⁶ He would have had the skill, knowledge, and desire to write the history of the Israelites. It has been shown that many terms used in the Pentateuch have been derived from Egyptian terms and show that the author had a familiarity with the Egyptian culture.^{707, 708} A comparable New Testament Times example to Old Testament Moses is the Apostle Paul. Both were educated and knew the scriptures, other subjects regarding their cultures, and wrote competently. Both were concerned about the Jewish people and their relationship with God.

⁷⁰³ Exodus 2:1-9; Acts 7:20-22.

⁷⁰⁴ Clay, on page 39-40, wrote "What is known about of the legend of Adapa is based upon several fragmentary tablets which at one time belonged to the Library of Ashurbanipal (66-626 B.C.),... and upon one that was found among the Egyptian archives of Amenophis III and IV, of the fourteenth century B.C.... Scholars have pointed out certain resemblances of the story to that of Adam in Genesis." The translation of verse 9 of the Babylonian tablet is, "The mighty one, the Atra-hasis of the Anunaki, is he." Atra-hasis, of course, is connected with one of the flood stories mentioned in this writing. The other significant finding regarding the Armana tablets is the documentation of the extensive communication among the great nations of the region during this time period- Egypt, Babylonia, Assyria, Mitanni, Hittites, Syria, Canaan, Alashiya (Cyprus). See Wikipedia under the Armana Letters.

⁷⁰⁵ Dr. Collins makes a strong case for the Pharaoh of the Exodus being Tuthmosis IV about 1450 B.C. S. Collins, *Let My People Go* (Albuquerque, NM: Trinity Southwest University Press, 2003). Others put the Exodus at a later date in the mid 1300's. The Armana tablets occur between these times from the approximate time period of 1400 B.C. It is probable that earlier documents existed as well. This is supportive of the argument for these extensive documents, and/or others, being available to Moses prior to the Exodus. Not only would he have had knowledge of the land of Canaan and its kings, so necessary for the entrance into the land, but also of the Genesis stories of the Creation, the Fall, and the Flood which he would have needed to compile that document.

⁷⁰⁶ *Jewish Encyclopedia Online*, 3/25/09th ed., s.v. "Garden of Eden.", http://www.jewishencyclopedia.com/view_friendly.jsp?artid+39&letter+E.

⁷⁰⁷ Hoffmier, J.K (1996).

⁷⁰⁸ G.L. Archer, *A Survey of the Old Testament* (Chicago, IL: Moody Press, 1974), 116-118.

C. Jesus acknowledged Moses as the author of the written Book of Moses.

He stated, “have you not read in the book of Moses” (Mark 12:26). Jesus went on to state; “Everything must be fulfilled that is written about me in the Law of Moses, the Prophets, and the Psalms.” (Luke 24:44). By implication Jesus acknowledged that there were 3 sources of written documents regarding his ministry, and the writings of Moses were one section of them. The book of Genesis has many references to the ministry of the Messiah, and must have been composed by someone in one of those groups. Moses stands as the most likely candidate.

The Documentary Hypothesis at its core has rejected the written authorship by Moses of Genesis and the Law, as has been available.⁷⁰⁹ It is used by many to deny the divine imprint on it.⁷¹⁰ Often Genesis has been viewed as simply a secular politically motivated document. In 1878, Robertson Smith in his preface to Wellhausen’s *Prolegomena* stated, that to many German theologians the “‘Grafian hypothesis’ ... the doctrine, that is, that the Levitical Law and connected parts of the Pentateuch were not written till after the fall of the kingdom of Judah, and that the Pentateuch in its present compass was not publicly accepted as authoritative till the reformation of Ezra... declared themselves convinced by Wellhausen's arguments.” He further stated, “The Historical Books and the Pentateuch are themselves very composite structures, in which old narratives occur imbedded in later compilations, and groups of old laws are overlaid by ordinances of comparatively recent

⁷⁰⁹ See Determinancy section, and below, for further discussion on Moses.

⁷¹⁰ N.L.Cardozo, *On Bible Criticism and Its Counterarguments* (online access 3/12/06). The Rabbi gives more nefarious reasons for the development of the Documentarian Hypothesis. He states, “Why were these earlier-mentioned theories ever accepted? In Wellhausen’s day the theory of evolution was dominant. Darwin had won the day, and any discipline, including literature, that accepted the theory of evolution was welcomed with open arms. Furthermore, the philosopher Hegel (1770-1831) had left a deep impression in German and European culture by contending that all of history is a development from lower to progressively higher stages. It was therefore assumed that the Jewish religion developed from idolatry, and having passed through many intermediate stages, the earlier one which was the Torah, reached the ultimate pre monotheism of latter days.”... “When anti-Semitic tendencies became stronger in the immediate pre-Hilter days, many scholars felt the need to use the Wellhausen and other theories to give a final blow to the Jewish people, religion, and Bible. When Friedrich Delitzch (1850-1922) delivered a lecture called ‘Babel und Bibel,’ in which *Tanach* was considered devoid of any religious or moral value Kaiser Wilhelm congratulated him for helping ‘to dissipate the nimbus of the Chosen People.’” Thus, popular science and philosophy were used by politics to rule religious thought.

date. Now, to take one point only, but that the most important, it must plainly make a vast difference to our whole view of the providential course of Israel's history if it appear that instead of the whole Pentateuchal law having been given to Israel before the tribes crossed the Jordan, that law really grew up little by little from its Mosaic germ, and did not attain its present form till the Israelites were the captives or the subjects of a foreign power. This is what the new school of Pentateuch criticism undertakes to prove, and it does so in a way that should interest everyone.”⁷¹¹

Green in his critique of Smith’s position quoted him (Smith) as having said,” It is a very remarkable fact, to begin with, that all the sacred law of Israel is comprised in the Pentateuch, and that, apart from the Levitical legislation, it is presented in codified form. On the traditional view, three successive bodies of law were given to Israel within forty years. Within that short time many ordinances were modified, and the whole law of Sinai recast on the plains of Moab. But from the days of Moses there was no change. With his death the Israelites entered on a new career, which transformed the nomads of Goshen into the civilized inhabitants of vineyard land cities in Canaan. But the Divine laws given them beyond Jordan were to remain unmodified through all the long centuries of development in Canaan, an absolute and immutable code. I say, with all reverence, that this is impossible.”⁷¹² Thus, he (Smith) simply denied the authorship of Moses, and what Jesus and other writers in the Bible had to say about him. He as well, rejected the inerrancy of the scriptures, a concept accepted by many if not most conservative Christian theologians.

Gunkel in 1901 continued this theme by writing,” One word more, in closing, as to how Genesis has obtained the **undeserved**⁷¹³ honor of being regarded as a work of Moses. From primitive times there existed a tradition in Israel that the divine ordinances regarding worship, law and morality, as proclaimed by the mouth of the priests, were

⁷¹¹ Robertson Smith Preface to Wellhausen’s Prolegomena reprint.

⁷¹² Quote from W. Smith In: Professor Robertson Smith on the Pentateuch by W. H. Green (1882) Nisbet and Co. Reprint Kessinger Publishing. Whitefish, MT.

⁷¹³ Bold lettering added by this present writer to draw attention to his comment.

derived from Moses. When, then, these ordinances, which had originally circulated orally, were written down in larger or smaller works, it was natural that they passed under the name of Moses. Now our Pentateuch consists, in addition to the collections of legends, of such books of the law from various periods and very diverse spirit. And because the legends also, from the time of the Exodus, have to do chiefly with Moses, it was very easy to combine both legends and laws in one single book. Thus it happened that Genesis has become the first part of a work whose following parts tell chiefly of Moses and contain many laws that claim to come from Moses. But in its contents Genesis has no connection with Moses. These narratives, among them so many of a humorous, an artistic, or a sentimental character, are very remote from the spirit of such and wrathful Titan as Moses according to the tradition, must have been.”⁷¹⁴ Gunkel flatly denied what was written in Deuteronomy 31:24-26, in that he stated that Moses did not write the Law but that it was initially passed down orally, and that others, especially Ezra used portions of what he said to compose and write down the Law. Clearly the Book of the Law had been misplaced at times before the time of Ezra, (2 Chronicles 34:15 during the time of Josiah) but this did not require it to be rewritten, as it was found. Ezra and other priests had it available to teach the people (Ezra 3:2).

He, Gunkel, also considered some or most of the writings attributed to Moses as legends. He defined legends as deriving from oral tradition; it “adopts and works over certain data which comes from reflection, tradition or observation.” He stated that they are a form of poetry, often relaying a certain point (i.e. religious) and not history. Per Gunkel history started from a written base.⁷¹⁵ He displayed, that like others, he was affected by the philosophy of the times.⁷¹⁶ He (and others-including Wellhausen and Smith)⁷¹⁷ accepted the evolution of man from a primitive state, with only an oral language, with the

⁷¹⁴ Gunkel (1901, reprint 1964) pg 159-60.

⁷¹⁵ Gunkel, *The Legends of Genesis*, 74 and 3-4.

⁷¹⁶ H. Cassuto, *The Documentary Hypothesis* (Israel: Shalem Press, 1941, reprint English 2006), 12. Also see Kikawada and Quinn (1985) page 9.

⁷¹⁷ N.L. Rabbi Cardozo, *On Bible Criticism and Its Counterarguments* (: The David Cardozo Academy), http://www.cardozoschool/show_article.asp?article_id+5738&cat_id=2287parent_id=2.

subsequent civilization of man and the development of the written language. He and the other documentarians assumed that the Hebrews were an oral tradition based society- in direct contradiction to what the sacred scriptures stated.⁷¹⁸ Contemporary views in science, i.e. evolution, and appealing linguistic viewpoints, superseded the plain readings of the scriptures.⁷¹⁹

More recently Noth in his A History of Pentateuchal Traditions (1948) wrote, “Therefore, to understand properly the structure and content of the Pentateuch as a whole and in its details, one must attempt to penetrate into the early stages of the history of its traditions. In this respect, the situation in the Pentateuch is completely different from that of the great literary histories found in the Old Testament. As literary works, these *originated* on the basis of literary activity. Granted, these works frequently absorbed traditions with a long prehistory of their own, whose origins reached back into the stages of oral transmission as is the case at least with the Deuteronomistic History. Nevertheless in each case they owe their existence *as a whole*, their arrangement and structure, to the work of a particular writer, the “author,” who had at hand the earlier traditions and complexes of traditions as literary sources and who, by using these sources, composed and arranged the work as a whole for the first and last time. In these cases the understanding of the total work must begin with an analysis of the work of each particular “author”. The Pentateuch, on the other hand, does not have an “author” in this sense at all.”⁷²⁰

⁷¹⁸ In Deuteronomy 31:26 Moses said, “Take this book of the law, and put it in the side of the ark of the covenant of the Lord your God, that it may be there for a witness against thee.” KJV

⁷¹⁹ Breece stated on page 93, “During his career as a theological professor, Wellhausen published many books in the German language on the subject of biblical criticism. Over the years, his reputation grew as the leader of a school of thought concerning a method of interpreting the Old Testament Scriptures. This school of thought came to be called *Higher Criticism*. Paul Heinisch, whose *Theology of the Old Testament* was translated into English by William G. Height, gives us insight into the thinking behind the new form of biblical interpretation of which Wellhausen was at the center: ‘Scholars who will not admit divine revelation seek to explain Old Testament belief in God in terms of evolution. They would have Old Testament monotheism be the resultant from lower stages, or from polytheism, or regard it as a peculiar instinct of the Semites, or as borrowed from neighboring nations.’ The perceptive reader will note the introduction of the ideas of Darwin on evolution into Old Testament biblical scholarship. There can be no doubt that the biological assumptions Darwin pressed upon our world were soon transposed out into the wider world of thinking on many subjects, including theology.” D. Breece, *Seven Men Who Rule the World from the Grave* (Chicago,IL: Moody Press, 1990), 89-104.

⁷²⁰ Noth continued to state, “The growth and formation of the large body of traditions now found in the extensive and complicated literary structure of the Pentateuch was a long process, nourished by many

Even to this day there are those who still propound the development of the Pentateuch through time, and not as the product of Moses.⁷²¹

With such a secularized political view of the scriptures among most if not all the Documentarian proponents it is not surprising that Moses was not considered the author of Genesis. **Yet the Bible itself proclaims Moses as the author of the books of the Law, archeology is compatible with it, written language was available, and it is most reasonable to accept that Moses did, in fact, at least compile and write portions of Genesis as its sole final author, and that he was the author of the books of the Law.**

Further aspects of Wellhausen's dissection of the Genesis and Pentateuch scriptures were in the form of 4 concepts:

- a.) Changes in vocabulary—especially the names of God;
- b.) Changes in narrative style;
- c.) Theological variances in portions of scripture; unnecessary even contradictory repetitions.⁷²²

roots and influenced by manifold interests and tendencies. In the course of this development, traditions which doubtless were circulated and transmitted orally at first were probably written down in time for reasons that are no longer known to us and to an extent that can no longer be determined with certainty. In any event, later on they were brought together in large literary works and these in turn, through the purely literary labors of so-called redactors, were finally compiled into the large corpus of the transmitted Pentateuch.... the Pentateuch is completely different from that of the great literary histories found in the Old Testament.... these originate on the basis of literary activity....in each they owe their existence as a whole, their arrangement and structure, to the work of a particular writer... The Pentateuch, on the other hand, does not have an 'author' in this sense at all. Even the original writers of the so-called sources of the Pentateuch, from which the whole was finally compiled cannot be regarded as 'authors' in this sense... they did not give them their basic form.... this form was already given in the beginning of the history of the traditions in a small series of themes essential for the faith of the Israelite tribes. These themes in turn constituted the content of more or less definitely formulated 'confessions' which were customarily recited at particular cultic celebrations." Noth, M, *A History of Pentateuchal Traditions* (Englewood Cliffs, NJ: Prentice Hall Inc, 1948, reprint 1972), 1-2.

⁷²¹ R.E. Friedman (2003) *The Bible With Sources Revealed: A New Look Into the Five Books of Moses*. Quoted in C.J. Collins, *Genesis 1-4*, 225.

⁷²² Kikiwada and Quinn, *Before Abraham Was*, 20.

Each of these concepts has been addressed and found incorrect or unnecessary by several authors.

(1.) Regarding the uses of the name of God:

Many have written on the names of God and the uses of these names in the Old Testament scriptures.⁷²³ These names include: Gen.1:1 Elohim “the strong one”; Gen.12:2 Adonai “Master”; Gen.2:4 Jehovah “the self-existent one”; Gen.17:1 El Shaddai “Giver of Strength”; Gen.14:18 El Elyon “God the highest”; Gen. 21:33 El Olam “the eternally existent one”; Isa. 9:6 El Gibbor “the powerful one”; Gen.2:4 Jehovah Elohim “Lord God”; Gen.15:2 Adonai Jehovah “Lord God”; and 1 Sam. 1:3 Jehovah Sabaoth “Lord of Hosts”.⁷²⁴ Compound names include: Gen.22:14 Jehovah-Jireh “Jehovah will see or provide”; Ex.17:15 Jehovah-Nissi, “Jehovah my banner”; Judg. 6:24 Jehovah-Shalom, “Jehovah is peace”; and Ezek. 48:35 Jehovah-Shammah, “Jehovah is there”.⁷²⁵ Each of these simply describes characteristics of God in His interaction with His people Israel.⁷²⁶

Yet, the Documentarians even dissect the scriptures based on the content of it as reflected in what they perceive to be the personality qualities of the name of God represented in that portion of scripture. Archer (not a Documentarian) has summarized their views:⁷²⁷

Yahweh—the name of God used by the unknown writer in the Southern Kingdom around 850 B.C. God was portrayed using anthropomorphic terms (i.e. possessing

⁷²³ *Fausset's Bible Dictionary* under the heading of “God”, 258.

⁷²⁴ *Naves Topical Bible*, (Chicago, IL: Moody Press, 1974), 887.

⁷²⁵ *Naves Topical Bible*, 639.

⁷²⁶ It is interesting to note that whereas the Jews have one God, with several aspects to him, other nations of people have broken up the attributes of “The One True God” into a pantheon of gods such as among the Greeks, Romans, Egyptians etc.

⁷²⁷ G.L Archer, *A Survey of Old Testament Introduction* (Chicago: Moody Press, 1964, revised 1974), 83-108.

body parts, passions of human beings). This writer tended to be more interested in ethical, theological concerns rather than legal sacrificial things.

Elohim (Priestly)—the name of God used in the writings in the Northern Kingdom about 750 B.C. The writer wrote in a more narrative style and was less concerned about ethical issues and more on rituals, i.e. worship. He portrayed God communicating through dreams, visions (rather than speaking directly to man in an anthropomorphic form).

Yet in conflict with the Elohim concept God Yahweh spoke directly to Moses in an “anthropomorphic guise” in Exodus-Numbers. But these are called “Priestly” documents.

Finally, in Deuteronomy, a writer (called the “Deuteronomist”) and thought to be the High Priest Hilkiah, wrote it as part of a reform program under King Josiah in 621 B.C. He was supposed to have also reworked Joshua, Judges, Samuel, and Kings.

It must be stressed that the use of God’s names in these ways and the association of who wrote certain passages of scripture and when is complete conjecture. It was developed within the precepts of the evolutionary ideas of a primitive state of man and polytheism. Archer also pointed out some other glaring inconsistencies:⁷²⁸ For example he commented on the position of the Documentarians; “The Elohist (P) which most differs from J in interest and style, must be the earliest (Jahweh being a later name for God than Elohim). Now on the contrary this P must be latest instead of earliest for this fits in better with evolutionary theory about the development of Hebrew religion from the primitive polytheistic to the priest-ridden monotheistic.” As well, “J of course later than E (all critics up to Graf); but no J is really earlier than E (Kuenen and Wellhausen).” Thus the Documentarians disagreed among themselves.

⁷²⁸ Archer, *A Survey of the Old Testament*, 92.

Archer has also shown that in most ancient Near East cultures the gods had several names: for example in Babylonia Sumerian counterparts were alternated with Akkadian names. Bel was Enlil and Numamnis, Anun was Ilum, Sin was Nanna, Ea was Enki, and Utu was Shamesh. This too was seen in Ugarit, Egypt, Greece, and Ebla.⁷²⁹

Regarding Repetitions:

b-d.) As well there is no reason to accept a fragmented composition based on supposed unnecessary or contradictory repetitions, theological variances, or changes in narrative style for the Noah flood account. It has been shown through several grammatical constructs that a unified rendition of the event is reliable. These include the following:

- (1.) Geneologic Inclusio⁷³⁰
- (2.) Repetitio mater studiorum⁷³¹
- (3.) Purposeful Textual Discontinuity (with a change of time/subject)⁷³²
- (4.) Verb tenses reflecting time sequencing⁷³³
- (5.) Palistrophic arrangements⁷³⁴ including chiastic^{565, 735, 736}

⁷²⁹ Ibid Archer, 124-5.

⁷³⁰ W.H. Shea, "The Structure of the Genesis Flood Narrative and Its Implications," *Origins* 6(1) (1979), 8-29, <http://www.grisda.org/orgins/06008.htm>.

⁷³¹ Kikawada and Quinn, *Before Abraham Was*, 93.

⁷³² D.W. Baker, "Diversity and Unity in the Literary Structure of Genesis," in *Essays on the Patriarchal Narratives*, ed. A.R. Millard and D.J. Wiseman (Winona Lake, IN: Eisenbrauns, 1983), 197-215.

⁷³³ Boyd, S.W., "Statistical Determination of Genre in Biblical Hebrew: Evidence for an Historical Reading of Genesis 1:1-2:3," in *Radioisotopes of the Earth*, ed. L. Vardiman, A.A. Snelling, and E.F. Chaffin (El Cajon, CA and Chino Valley, AZ: Institute for Creation Research and Creation Research Society, 2005), 631-734.

⁷³⁴ G.J. Wendam, "The Coherence of the Flood Narrative," in *I Studied Inscriptions before the Flood*, ed. R. S. Hess and D.T. Tsumura (Winona Lake, IN: 1994).

⁷³⁵ B.W. Anderson, "From Analysis to Synthesis: The Interpretation of Genesis 1-11," in *I Studied Inscriptions before the Flood*, ed. R.S. Hess and D.T. Tsumura (Winona Lake, IN: , 1994).

concentric parallelism ^{737, 738}

(6.) Unity of structure within Genesis and the Pentateuch ⁷³⁹

(7.) Genealogy- history; thematic pattern of generations ⁷⁴⁰

(8.) Contemporary Discourse Analysis ^{741,742}

(9.) Toledot Theory ⁷⁴³

(10.) Precise Timing of events. (**Table 1**)

(11.) Consistency Between the Old Testament and the New Testament. ⁷⁴⁴

In the *geneologic inclusio*, for example, Gen. 6:9-10 and 9:18-19 serves to demarcate the prologue and epilogue from the main body of the narrative. The first is composed of generations of Noah and the second those who left the ark. God then covenants with Noah before the flood (6:18) and afterwards (9:9, 9:11-13, 9:15-17).

⁷³⁶ E.W Bullinger, ed., *The Companion Bible being the Authorized Version of 1611 with Scriptures and Notes, and Critical, Explanatory and Suggestive and with 198 Appendixes*, CD from Graceworks Multimedia Ebooks at: stores.ebay.com/GraceWorks-MM.

⁷³⁷ Cassuto stated, "In the section of the Circumcision, the name *Elohim* serves also to emphasize the parallelism between Abraham and Noah and Adam. Ten generations after the original progenitor of humanity, Noah arose—a wholly righteous man, who walked with God in the midst of a generation that was altogether wicked, and, on account of his righteousness, was saved from the universal retribution and became the father of all mankind after the Flood. Ten generations after Noah came Abraham, who also was alone in recognizing his Creator in a generation that was estranged from Him, and because of his righteousness was chosen to be the physical ancestor of the treasured people and the spiritual father of all mankind; and he was enjoined, in words similar to those used of Noah: *Walk before Me and be wholehearted.*" Cassuto, U., *The Documentary Hypothesis* (Jerusalem and New York: Shalem Press, 2006), 46.

⁷³⁸ K.A Kitchen, *On the Reliability of the Old Testament* (Grand Rapids, MI: W.B. Eerdmans Publishing Co, 2003), 105,170-71.

⁷³⁹ W.H Green, *The Unity of the Book of Genesis* (Baker House, MI: Baker House Publishing, 1895, reprint 1979).

⁷⁴⁰ Dewitt 1977

⁷⁴¹ Collins (2006)

⁷⁴² R.E Longacre, "The Discourse Structure of the Flood Narrative," in *Society of Biblical Literature 1976 Seminar Papers*, (MT: Scholars Press, University of Montana, 1976), 235-261.

⁷⁴³ See Connectedness Section.

⁷⁴⁴ See the Connectedness Section—particularly the writings of Genesis and Peter the Apostle.

This forms a unity in composition. It is clear that the author intended this structure, and it supports the unity or oneness of the account.

Regarding *repetitio mater studiorum*, Kikawada commented that “repetition, after all, is one of the most fundamental tools of the literary artist, either oral or written. And this why the Greek and Roman rhetorical traditions developed such an elaborate terminology to classify the different kinds of repetition: *Repetitio mater studiorum*.”⁷⁴⁵ It has been a linguistic tool used in the ancient cultures, and supports the concept of the Noah flood account being of an ancient construct- and its unity.

Baker has noted that much of the text displays a progression punctuated with purposeful demarcations (purposeful textual discontinuity). He noted the separation of the text by days and verb forms. This implies an intended continuity.⁷⁴⁶

Dr. Steven Boyd has been able to show that in the construction of the Genesis scriptures there is a definite trend in the types of verbs used in poetic vs. narrative

⁷⁴⁵ Kikawada and Quinn, *Before Abraham Was*, 93. In this they were addressing the use of two names of God within the same sentence; “the final climax of the Noah story occurs when Noah himself speaks for the very first time. He utters a curse and then utters a blessing. The blessing begins, ‘Blessed be Yahweh, Elohim of Shem.’” The authors had on a previous page 91 shown how the doubling of the divine name occurred in other ancient languages and writings such as in the Atrahasis Epic, and in Akkadian and Ugaritic works.

⁷⁴⁶ Baker, *Diversity and Unity in the Literary Structure of Genesis*, 197-215. He noted purposeful indicators of discontinuity in the book of Genesis. These included syntactical changes: 1) in time e.g. Gen. 7:6 “and Noah was 600 years old” at the onset of the flood; 2) in subject e.g. Gen. 16:1 introduced Sarai, 3) time/subject e.g. the geneologic listings such as Gen. 4:1-24, and 4) in venue e.g. Gen. 37:1 “Following the genealogy of Esau in Genesis 36, ‘Jacob settled (*wayyeshab*) in the land of the residence of his fathers, that is, in the land of Canaan’ (37:1). This served as a bridge between the preceding genealogy and the following *tol’dot* formula and the Joseph story.” Structural indicators of the text framework included headings, summaries, and subscripts. And rhetorical devices pointed to self-contained units distinct from the context.

Baker concluded on page 214, “The Hebrew text of Genesis fits well into its contemporary literary milieu as far as its structure is concerned. Divisions between text sections in other documents, while at times employing overt, extra-textual indicators of separate units (e.g. rulings or spaces) which are not used in the Hebrew Old Testament, share many similarities with those divisions which are indicated in Genesis within the text itself. **There is nothing out of the ordinary in the structure of the book which might indicate that it is a heterogeneous amalgam of originally separate sources which have been melded, at times leaving evidence of crude joins, as some have proposed.** As far as the matters discussed in this paper are concerned, **Genesis appears to be a well-structured literary document.**”

sentences. Passages were taken from all the subgroups of the OT. In those sections thought to be narrative in composition the use of preterite to total finite verbs was 52% (if random usage would expect 25%). In those passages thought to be poetic the use was less than 5%. When looking at the flood account it fell into the narrative category. Using logistic regression the probability that Gen.1-2 and the Flood Gen. 6-9 were narratives was 0.9999%.⁷⁴⁷ This too, is a strong indicator that the Genesis flood story was intended, by the writer, to be a narrative.

The palistrophe, as a construct of parallel or doublet commentaries, was a common literary structure used in ancient near east documents, and was often used in what appear to be narrative documents.⁷⁴⁸ Its use in the Noah flood account is both indicative of a unity of structure, of its ancient recording, and use as a narrative. Palistrophes can also be seen as chiastic structures where there is a symmetry to the text such as the crescendo/decrescendo in the flood story (**Figure 12**).⁷⁴⁹ It does show a purposeful organization to the texts, but also confirms their continuity.

Both Collins and Longacre have shown using contemporary discourse analysis that Genesis shows continuity consistent with that expected in a narrative document. Sentences that contain the verb waw plus prefixal carry the main line of the story throughout the flood narrative. Repetitive sections were used to emphasize certain points, and the crescendo/decrescendo structure of the flood is highlighted as being a continuous structure. This type of analysis looked at the document as a whole.

⁷⁴⁷ Steven Boyd, in *Radioisotopes and the Age of the Earth*, 2005.

⁷⁴⁸ In Egyptian writings Hoffmeir (1996) noted that many are composed in a chiastic or palistrophe; pg. 37-43

⁷⁴⁹ This crescendo/decrescendo pattern can be seen in the line of continuity of the scripture were Noah entered the Ark, the waters rose, the climax of God remembering Noah, the subsiding of the waters, and Noah leaving the Ark. The antiquity of the text is reflected in that both the lunar month and the solar year are used to determine the length of the flood. These sorts of calculations go back to the earliest of times. From a revisionist point of view there was no reason to retain both forms of calculations—the redactor (previous section) should have corrected this; that is if there really had been a piecing together of two documents.

From this, these two authors have concluded that the portions of Genesis that include 1-4 and Gen. 6-9 are consistent with a unified narrative structure.

The continuity within the scriptures of Noah and the ark takes two forms: 1) Consistent structure(s) similar to other narrative accounts found in other parts of the Old Testament; and a similar view of Noah and the flood between the Old and New Testaments. Kikawada has demonstrated that there may have been a kind of formatting of accounts that was commonly used in ancient texts. He compared Genesis 1-11 with the books of Samuel and Kings; of Adam/Eve juxtaposed to David/Bathsheba and Noah/flood juxtaposed to the rebellion of Absalom.⁷⁵⁰ 2) It is also apparent that the views of the writers of both the Old and New Testament were harmonious, Noah was a real man, and he is listed in family lineages by writers of both the Old and New Testament. He and his family went through a flood, and they survived, but the rest of mankind was destroyed- because of their sins. It also consistent with a universal judgment as the pronouncement of God against angels who sinned which is paralleled with that against mankind who sinned then and at the time of Christ's coming.⁷⁵¹ Thus writers separated by 2-3000 years of time maintained a similar view of the historicity of Noah and the ark and the reasons and implications of why it occurred. It was recorded in prophetic, historical, law, and apostolic writings. Even Jesus was quoted as referring to Noah and the days he lived in as being similar to the days when He, Jesus, would return.⁷⁵² The flood was not considered just a natural phenomenon, but a purposeful physical occurrence done by the hand of God by both New and Old Testament writers.

External evidence of its continuity has been found among other literary sources in other flood legends that have remarkable sequential parallels to the Noah narrative.

⁷⁵⁰ I. M. Kikawada and A. Quinn *Before Abraham Was*, 1985, chapter 5.

⁷⁵¹ KJV: Old Testament scriptures include Genesis chapters 5-9; 1 Chronicles 1:4; Isaiah 54:9; and Ezekiel 14:14, 20. New Testament scriptures include Matthew 24:37; Luke 3:36, 17:26; Hebrews 11:7; 1 Peter 3:20; and 2 Peter 2:5.

⁷⁵² Matthew 24:37; Luke 17:26.

Even among secular sources these documents are considered to be unified compositions, even those considered myths. And yet there are remarkable differences. Smith has laid this out in his book.⁷⁵³ He lists 23 areas of comparison. The importance of this is that Table 11 was at its discovery the most complete of the tablets discovered. Its estimated date of production is 650 B.C. and this would put it before the supposed compiling of the Book of Genesis by the J and P editors and later redactors. It is thus documented in **hardened clay** that the flood story is a unified account. This undermines the concept of later fragments of several sources being piecemealed together in the post-exile Judean area. As well, its similarity to the Biblical Noah flood account supports the antiquity of both accounts and a common source for them. However, it does not force the idea that the Noah account is a simple derivative from the Mesopotamian one. This fact alone, but along with others mentioned previously and with Dr. Green comments below, strongly undermines any validity of the Documentarian Hypothesis.

In dealing with the Documentarian hypothesis Green, in 1895, carefully critiqued the views regarding the book of Genesis. His assessments were methodical and extensive. He has not been successfully refuted.⁷⁵⁴ The overall implications of his review are that the separation of the flood account into J and P documents renders two incomplete and less comprehensible stories than if the document is read as one unified whole. This is a direct contradiction to the Documentarians who state that the two accounts are of separate origins and subsequently interwoven together.^{755,756}

⁷⁵³ G. Smith, *The Chaldean Account of Genesis*, (1876) 286-7.

⁷⁵⁴ W.H. Green *Unity of the Book of Genesis* (1895, reprint 1979).

⁷⁵⁵ Speiser commented regarding the sources of the Genesis account, "The received biblical account of the Flood is beyond reasonable doubt a composite narrative, reflecting more than one separate source. One of the sources goes back to *P*, and is easy enough to identify except for a clause or two. But the identity of the narrator or narrators other than *P* has caused considerable trouble and debate. Nevertheless, if one is prepared to overlook a few highly technical details- as one must in a comprehensive study- it should not be too hazardous to accept J as the only author involved." He goes on to proclaim, "That the biblical account as a whole goes back ultimately to Mesopotamian sources is a fact that is freely acknowledged by most modern scholars...." E.A. Speiser, *The Anchor Bible*, ed. W.F. Albright and D.N. Freedman, *Genesis* (Garden City, NY: Doubleday and Company, Inc, 1964, 3rd printing 1980), 54-55.

He also noted numerous violations of the rules set up to designate which portions belong to J and which to P. Often the use of a supposed redactor was used to deal with these discrepancies.

Example of the fragmentary nature of J and P: Green's analysis of the Documentary Hypothesis in Genesis 6:5 to 9:22 are given below, with some added comments by von Rad (a documentarian). See also the **Table 2** with comments:

Gen.6:5-8

- 1) Noah's name is assigned to **P** in verse 5:29, as he is named by his father- a Priestly quality. Yet his first mention in Gen. 6:8 is in a **J** section and assumes the reader to be familiar with his name (from the **P** document). von Rad acknowledges that **Y (J)** only records the name and not the personal nature of Noah expected i.e. **P**.⁷⁵⁷
- 2) Verse 6:7 was assigned to a redactor "because such detailed enumerations are foreign to **J**".⁷⁵⁸
- 3) There is a gap from 6:8 to 7:1 in **J** where there is no explanation of God commanding the ark to be built, of the specifics of whom in the family to go into the ark. (It is all in **P**). VonRad recognizes this: "The biblical story of the Flood as it now exists is an ingenious interweaving of the two sources **J** and **P**."

⁷⁵⁶ Von Rad stated, " The preceding discussion presupposes the recognition of a fact that has become accepted in contemporary Old Testament science after almost 200 years of research: The books Genesis to Joshua consist of several continuous source documents that were woven together more or less skillfully by a redactor. The oldest source documents are known as 'Yahwist' (J) and 'Elohist' (E) because of their distinctive use of the name of God. The Yahwist may be dated ca. 950, the Elohist perhaps one or two centuries later. Deuteronomy (D) is literarily distinct; we have it in the book of Deuteronomy, but Deuteronomistic additions and revisions occur also in the Book of Joshua. The latest source is the Priestly document (P); its actual composition (without the later additions, of course) falls in the postexilic period, ca. 538-450."... He then comments, like Speizer, "This is not the place for even a partially exhaustive characterization of the descriptive method of the sources." Von Rad, G, *The Old Testament Library*, ed. P. Ackroyd, Anderson, B.W. and J. L. Mays, *Genesis* (Philadelphia: The Westminster Press, 1972), 24-25.

⁷⁵⁷ Von Rad, G, *The Old Testament Library*, ed. P. Ackroyd, J. Barr, B. W. Anderson, and J. L. Mays, *Genesis* (Philadelphia: Westminster Press, 1972), 118.

⁷⁵⁸ W.H. Green *Unity of the Book Genesis* (1895, reprint 1979) 72.

The redactor has wonderfully worked both texts together in such a way that both Flood stories have remained almost intact.... The only major loss of text of which we have to complain concerns the Yahwistic source. In it the command to enter the ark [see Gen.7:1-5] could not have followed the ‘prologue’ (ch.6:5-8). This command must have been preceded by an order to Noah to build the ark....” He then says that this part of Y “was sacrificed to the more extensive account of the Priestly document, chapters 6:13-22 (composed of ten verses!).”⁷⁵⁹ **This was completely an assumption!**

Gen. 6:9-22

- 1) In this section there is no reference to the earth having been good. There is no explanation as to the change that occurred in men’s hearts in J (it is seen only in P).⁷⁶⁰
- 2) There is a gap in building the ark missing from J.⁷⁶¹ Von Rad responded that in J, Noah built the ark in “blind” faith without knowing God’s purpose.⁷⁶²

Gen.7:1-5

- 1) Green criticized the Documentarians as to how in Gen. 7:2 the clean enter by 7’s and the unclean by two’s yet in Gen.7:8-9 both the unclean and the clean enter by two’s. He said that it is not as “we are told that the documents ‘are woven together in a highly artistic manner,’ and that the redactor’s work is ‘admirably’ done.”⁷⁶³ Green went on to point out that these scriptures are not

⁷⁵⁹ G. Von Rad *Genesis* (1972) 119.

⁷⁶⁰ Green, 73.

⁷⁶¹ Green,73.

⁷⁶² vonRad, 120.

⁷⁶³ Green,74.

contradictory if the first is looked at as being general and the second as being more particular.

Gen. 7:6

No comment.

Gen.7:7-10

- 1) In verse 9 “we are told, has been manipulated by a redactor. The words ‘there went in two and two,’ ‘male and female’ and ‘God’ are characteristics of **P**. Here again the text is not in accord with the hypothesis; a number of **P**’s words and expressions are in a **J** paragraph, and it must be the fault of the redactor.” VonRad does not address this problem.
- 2) Verse 7 should be listed as **P**, as it is more specific regarding Noah and the characteristics of **P**. Verse 10 should be listed as **P** as it refers to verse 7:6 but is listed as **J**.

Gen.7:11(b)-12; 7:13-16

- 1) Green comments, “In what follows, the semblance of continuity can only be made out for J by means of scattered sentences in an arbitrary manner.”⁷⁶⁴
- 2) There is a gap between raining forty days and forty nights and God shutting Noah in the ark, i.e. verse 7:12 and 7:16(b).
- 3) Sluices of heaven are listed as **P**, but rain is listed as **J** separating the two parts of the action.
- 4) God’s name is separated in verse 7:16a from 7:16b when if they had been put together would have revealed a compound name: God as Elohim (lawgiver) and

⁷⁶⁴ Green,75.

as Yahweh (the personal one) as Noah's divine protector.⁷⁶⁵ This compound name would give a much richer meaning to this portion of scripture.

- 5) In **J** it rains upon the earth forty days and forty nights... then the Lord shuts him in the ark. There is a significant discontinuity of this section if the **J** portion is read alone, with "no proper connection" between the events. However, if read as one unit it then reveals "Elohim, the God of creation and providence directed" the animals entering the ark, and "Jehovah, the guardian of his people, shut Noah in." Again, this simply represents two of the attributes of God (general and personal) and not separate origins of documents melted together.

Gen.7:17-23

"The rise of the waters of the flood is depicted in vs. 17-20 in four successive stages. The critics arbitrarily sunder one of these (vs.17) from the rest and assign it to **J**. The destruction accomplished by the flood is similarly described in three successive statements of growing intensity (verses 21-23). Two of these are parted from the remaining one and given to **J** (verses 22, 23)."⁷⁶⁶ Because of the commitment to a two or more author source, the documentarians completely miss the emphasis being placed on the progressive rise of the flood- taking the ark from the ground, to floating, to floating over all mountains. The doublet of emphasizing the death of all animals that had 'life in its nostrils died' was ignored. A local transient flood would not be so catastrophic- it is understandable given their bias that they would not perceive (or accept) the magnitude of this event.

Gen.7:23-8:5

J's story goes from Noah and those left in the ark (vs. 7:23) to 8:2b to where water is restrained and 'ebbs' from the earth. But in vs.7:24 P says that the

⁷⁶⁵ Green,75.

⁷⁶⁶ Green, 75.

water prevailed upon the earth. Green commented “The intelligent redactor has been at fault again. He has inserted this clause respecting the stopping of the rain in the wrong place. It should have preceded vii.24, instead of following it.”⁷⁶⁷

The documentarians arbitrarily (as in 7:11, 12) separate 8:3a from 8:3b where it is “severing what of necessity belongs together.”⁷⁶⁸ There is a connectedness in “The tenses of the Hebrew verbs at once indicate to the reader that the bursting forth of the fountains of the great deep and the opening of the windows of heaven are separate items, while the fall of the rain is a sequence of that which just preceded it. The thought is not complete until the actual fall of rain is added.”⁷⁶⁹ Thus, it is a disconnect to separate vs. 8:2 (**P**) from 8:3a (**J**) and from 8:3b-5(**P**). It arbitrarily fragments both **J** and **P** if the attempt is made to read them independently.

Gen. 8:6-12

The current arrangement of **P** makes no mention of the dove or raven. Yet, Asturc and Eichhorn assign the birds to **P**. Hupfield gives the raven to **J** and the dove to **P**. Delitzsch reverses this. Wellhausen and others assigned them to **J**. As such it has left **P** without that portion of the story.⁷⁷⁰ Green comments that **J** was preferred by the documentarians as it, the portion with the birds, was more ‘picturesque’. Thus it was more compatible with **J**. But, he argues, it could have been just as easily assigned to **P** for its ritualistic stereotypic content. What an arbitrary treatment of sacred scripture by the documentarians!

Gen. 8:13-19

The story is again fragmented with **P** mentioning Noah leaving the ark, but not **J**.

⁷⁶⁷ Green, 75.

⁷⁶⁸ Green, 76.

⁷⁶⁹ Green, 82.

⁷⁷⁰ Green, 81.

There is an arbitrary partition of 8:13a(**P**) from 8:13b(**J**) to 8:14(**P**) which breaks apart what is meant to be a continuous two step progression in the drying of the earth.

Gen. 8:20-22

J mentions a sacrifice, **P** mentions nothing regarding this even though **P** is the portion of the document that is suppose to come from a priestly source. It is this supposed source that contains the legal aspects of the book of Genesis. Why would it not contain the segment regarding the sacrifice- a legal procedure? Even the Chaldean stories contain the sacrificial system (pg.82).

Green stated in conclusion: that “important gaps[are] created by the [arbitrary] critical partition; other chasms scantily bridged by scattered clauses torn from their context, in which they are indispensable, or attached to passages where they are inappropriate; expressions which by critical rules cannot belong to **J**[and to **P**], and require the assumption, which has no other basis than exigencies of the hypothesis, that the text has been manipulated by the redactor; and discrepancies, so called, which are wholly due to the redactor’s gratuitous interference.”⁷⁷¹ (Brackets include insertions by this author.) The claim of two whole flood stories seamlessly woven together is at best a frazzled patchwork if not unwoven. It is amazing that one documentarian advocate breaks the Genesis text into as many as 11 different authors.^{772,773} To pull the text apart into so many pieces would be to create a *reducio ad absurdum*.⁷⁷⁴

⁷⁷¹ Green (1895, reprint 1979) 77.

⁷⁷² The author lists 5 **J**; 2 **E**; and 4 **P** writers or a total of eleven. Houk,C.B, "Statistical Analysis of Genesis Source," *JSOT* 27.1 (2002): 75-105.

⁷⁷³ This Wikipedia article lists: “the Jahwist source (**J**): written c. 950 BCE in the southern kingdom of Judah; the Elohist source (**E**) written c. 850 BCE in the northern kingdom of Israel; the Deuteronomist source(**D**) written c. 600 BCE in Jerusalem during a period of religious reform; the Priestly source (**P**) written c. 500 BCE by Aaronic priests in exile in Babylon; and the Torah redactors: first **JE**, and finally **JEDP**, producing the final form of the Torah c.450 BCE." *Wikipedia*,ed., s.v. "Documentary Hypothesis.", en.wikipedia.org/wiki/Documentary_hypothesis.

⁷⁷⁴ The Rabbi stated “His students [Wellhausen’s] continued to use his method and discovered within their teacher’s J,E,P, and D documents at least thirty additional documents. Each document (especially J and E) contained a number of older elements; each had undergone a certain amount of

Green without the more recent analyses and newly available archeological and linguistic documents had effectively discredited the Documentary Hypothesis. Others like Kikawada, more recently, have added sophistication to the argument. These authors also demonstrate that Genesis is a unified, coherent, carefully crafted document that is both historically and morally/ethically a presentation of the mind of God to men.

Finally, the use of the *toledot* reflected the generations of real people, organized the document into a whole, and may reflect the use of cuneiform documents by Moses to research and compose the book of Genesis.⁷⁷⁵

Sub-Conclusion on Discussion Regarding Connectedness

It is a wonder to this author why the German higher critics showed any interest in the biblical scriptures. The internal consistency of the Old Testament regarding the authorship of the Law, and most including Genesis, in the Pentateuch is clear- Moses is credited with it. To deny this is to deny the statements of Old and New Testament writers.⁷⁷⁶ If one does so then the credibility of any scripture is thrown into doubt,

‘editorial’ revision in an effort to coordinate and harmonize the various elements within the style of the original. The additional materials were so extensive that they could not have been the products of only a handful of authors, but rather belonged to a complete religious school. The materials were cut even finer. Slowly, more and more forgeries were ‘discovered,’ until finally half a dozen documents were found for each single verse and others even went as far as tracing them through some of the other books of *Tanach* as well. The whole theory degenerated into a **reductio ad absurdum**.” Rabbi Cardozo, from the David Cordozo Academy, On Bible Criticism and Its Counterarguments, dated 3/12/06. Accessed online 2009.

⁷⁷⁵ C. Wilson

⁷⁷⁶ Mark the Apostle wrote in his book in verse 12:26, “And as touching the dead, that they rise: have ye not read in the **book of Moses**, how in the bush God spake unto him, saying, I am the God of Abraham, and the God of Isaac, and the God of Jacob?” This passage which quoted Jesus referred to Exodus 3:6. John the Apostle quoted Jesus as having said, “Did not **Moses give you the law** . . .” In Hebrews 10:28 the author (most likely the Apostle Paul) commented, “He that despised **Moses’ law** died without mercy under two or three witnesses:” This was in reference to Deuteronomy 17:6. 2 Chronicles 23:18 refers to the law of Moses, “whom David had assigned over the house of the Lord, to offer the burnt offerings of the Lord, as it is **written in the law of Moses** . . .” In Exodus 20:24 Moses is instructed to proclaim to the people the requirements of the burnt offerings to the Lord. In Exodus 17:14 it is recorded that God said to Moses, “And the Lord said unto Moses, ‘**Write this for a memorial in a book**, and rehearse it in the ears of Joshua: for I will utterly put out the remembrance of Amalek from under heaven.’” Verses are from the

including the accounts of what Jesus is suppose to have said. However, as a lawyer might say- Moses had the weapon, i.e. training as a scribe and access to documents (needed for compiling the history of Israel), the will or motive- as shown when he killed the Egyptian to save a Jewish slave, and was in the right time/place- he lived in Egypt at the time of the Exodus and the giving of the Law. There are no good reasons to question his authorship, except from the unfounded presuppositions of the “Higher Critics”.

Regarding the unity of the book of Genesis and the Pentateuch, as a whole, there are ample reasons to believe it is the product of one author, completed in writing during his (Moses’) life time, with a couple of subsequent minor editorial comments- like listing the death of Moses.⁷⁷⁷

There are strong reasons that support this:

- a.) Archeology findings are supportive of this- e.g. early forms of writings demonstrating that Moses did have the availability of writing;
- b.) Linguistic structures that are found in other ancient documents as well as in the books of Moses and the use of derived Egyptian terms in the books that support the antiquity of the composition of the Pentateuch;
- c.) Linguistic structures are contained within the book of Genesis that give strong support that the story of the flood is a unified (**connected**) eye witness account and not a fragmented one;⁷⁷⁸ and
- d.) The scriptures, within, state that Moses was the author (at least of the Law). That it was written in a form so as to present ethical and moral teachings is unquestioned, but it is not the product of several authors in its final form.

KJV. There are 760 verses in the Old Testament that refer to Moses and 79 in the New Testament. Many refer to the book(s) of Moses, or the writing of the law by him.

⁷⁷⁷ Deuteronomy 33:1

⁷⁷⁸ This includes the linguistic structures of the Palistrophe and parallelism, Geneologic Inclusio, Repetio Mater Studiorum, Purposeful textual discontinuity, Verb tenses reflecting time sequencing, Contemporary discourse analysis, Unity of structure within Genesis and other parts of scripture, Geneology-history; thematic pattern of generations, precise time sequencing, and the Toledot theory. These concepts are discussed in the section Connectedness.

e.) There is a continuity of perspective among the writers in both the New Testament and the Old Testament of the manhood of Noah, his building the ark, having a family, and of them being saved from the flood judgment of God upon all others of mankind.^{779,780}

Finally, the documentarians were affected by the political, social, and secular philosophies and views of the sciences of their times. They did not believe in or retain a confidence in God's ability to maintain His oversight of the Holy Writ.

The Genesis flood story is a unified literary structure. It displays a time sequential pattern consistent with a historical narrative script. It was written by Moses. It is probable that he did use an older document, regarding the one Noah flood story, as it was an event before his lifetime, which he then inserted into the larger text of the book of Genesis. It fulfills the component of Connectedness in a TNR.

⁷⁷⁹ Peter the Apostle wrote in 1 Peter 3:20, "...when once the longsuffering of God waited in the days of Noah, while the ark was a preparing, wherein few, that is, eight souls were saved by water." The Apostle Matthew quoted Jesus in Matthew 24:37, "For as in the days before the flood they were eating and drinking, marrying and giving in marriage, until the day that Noe entered the ark, and knew not until the flood came, and took them all away...." In Genesis 6:13-14; 7:1 it says, "And God said unto Noah, 'The ends of all flesh is come before me; for the earth is filled with violence through them; and I will destroy them with the earth. Make thee an ark of gopher wood'... And the Lord said unto Noah, 'Come thou and all thy house into the ark for thee have I seen righteous before me in this generation.'" Verses are from the KJV.

⁷⁸⁰ All the families of men from Noah acknowledged in Old Testament Gen.10:32 and New Testament Acts 17:26.

GENERALIZABILITY

A. Local flood vs. regional or worldwide flood

The biblical account gives the readable impression that the Noah flood account was of a worldwide scope. It speaks in terms of “all” mountains being covered, “all flesh” (outside the ark) dying. There are events that can only be described as supernatural- God bringing the animals to Noah, God Himself closing the ark door. No other event in history indicates God doing this. Its uniqueness as an event, once in history, is supported by the comment that the rainbow was displayed after the flood abated as a sign that God would never again flood the earth. Rainbows are seen over the entire earth. The Noah Flood Account, as portrayed in the Bible, has been understood as a worldwide event by some Bible expositors, but not by many others. The antagonist Thomas Huxley chided those Christian apologists for attempting to place The Flood into a local context instead of a “universal” one when the language clearly presented it as worldwide.⁷⁸¹

When local flood histories are reviewed certain facts recur. The hills, trees, often houses and other manmade items remain standing—especially if it is a wide spreading flood where the depth of the water and velocity are lower than in narrow valley floods. The flooding of Hurricane Katrina flooded much of New Orleans and other areas causing much damage; but still houses, trees, power lines etc., though damaged, remained standing. The Sumatra Tsunami that caused such loss of life also left buildings, trees, and boats mostly intact (**Figure 13a**). The effect was similar but more localized from the flood in Johnstown PA that happened during 1884 (**Figure 13b**).

⁷⁸¹ Huxley stated, "Thus I may be permitted to spare myself and my readers the weariness of a recapitulation of the overwhelming arguments against the universality of the Deluge, which they will now find for themselves stated, as fully and forcibly as could be wished, by Anglican and other theologians, whose orthodoxy and conservative tendencies have, hitherto, been above suspicion. Yet many fully admit (and, indeed, nothing can be plainer) that the Pentateuchal narrator means to convey that, as a matter of fact, the whole earth known to him was inundated; nor is it less obvious that unless all mankind, with the exception of Noah and his family, were actually destroyed, the references to the Flood in the New Testament are unintelligible. But I am quite aware that the strength of the demonstration that no universal Deluge ever took place has produced a change of front in the army of apologetic writers. They have imagined that the substitution of the adjective "partial" for "universal," will save the credit of the Pentateuch, and permit them, after all, without too many blushes, to declare that the progress of modern science only strengthens the authority of Moses." He goes on to even ridicule the idea of trying to reconcile a local flood with the biblical account. Huxley, T.H, *Science and Hebrew Tradition essays* (New York: D. Appleton and Company, 1897), 219-220.

Volcanic destruction, in observed history, has provided some important insights how some parts of the geologic record may have formed. The destruction of a volcano is local in impact, but it can be devastating. Mount Vesuvius, in 70 A.D., piled up to 60 feet of volcanic ash rapidly, within several days, over the towns of Pompeii and Herculeum. The initial event was so rapid that people and animals did not have time to escape or decay, and castings of their bodies in the last stages of dying can be discovered today (**Figure 14a**). Yet the earthwork buildings with elaborate plaster paintings have remained on the walls. At Martinique, in the early 1900's, the pyroclastic gas flow was actually photographed. There was less ash than at Pompeii, but humans and animals rapidly died as they attempted to escape town (**Figure 14b**). Yet, buildings and trees remained standing. However, when Mount Saint Helens erupted the blast zone flattened and striped trees of branches, roots, and bark. Deep layers of laminated strata, up to 100 feet in depth, were rapidly deposited (**Figure 14c**). Canyons were formed within hours and even erosion through basaltic rock occurred.^{782,783} The impact of volcanic action is highly variable, and can be devastating, but it is also local in effect.

One does not get a similar impression from a reading of the Biblical account. The destruction was complete, except for those in the ark.⁷⁸⁴ While various natural disasters

⁷⁸² It is interesting to note that in the first half of the 1800's a debate was occurring over whether erosions through basaltic rock occurred rapidly or over eons of time. Rev. Pye Smith argued that it took long ages for a stream to erode through the rock. Rev. Young presented evidence that showed rapid erosion through the rock within one year by the development of fissures.

Dr. Austin commented that the Mt. St Helens eruption spewed forth 0.25 cubic miles of ash, but other "super" volcanoes are calculated to have spewed forth up to 600 cubic miles of ash in the Yellowstone Huckleberry Ridge Tuff which spread over the entire western United States. He conjectures that another eruption was the Independence Dike Swarm. "This colossal eruption deposited the Brushy Basin Member of the Morrison Formation ('Upper Jurassic') of the Rocky Mountain and Great Basin regions, which today contains more than 4,000 cubic miles of ash. Within the Brushy Basin ash are sandstone beds that represent the gigantic mudflows that swept up and buried dinosaurs." Thus, even the dramatic activities of Mt. St. Helens are dwarfed by the calculated catastrophic activities of the past. S.A. Austin, "Supervolcanoes and the Mount St. Helens Eruption," *Acts and Facts* (May 2010): 4-5.

⁷⁸⁴ See the sections on Determinancy and Connectedness. The symbolism of this completeness is important for it is an allegory for those lost or saved by whether they have faith in Christ's death on the cross. The "universality" of the cross loses impact if the flood is not "universal" and complete in its work. For if the flood is local, is salvation local- can one be saved depending on what one believes or how one lives? See post-script as well.

observed today can give some hint as to what a worldwide flood might be like, they are only a glimpse. To assume that mankind has not had a “current” or repeated worldwide flood and therefore one must not have occurred is to bow to the assumptions of an uniformitarian belief system promulgated by Charles Lyell and others.

Are there physical, anthropological, and biochemical evidences for a single worldwide destructive flood? The answer is yes. In this dissertation I did not attempt to survey all of science but simply to point out key observations that are consistent with a worldwide flood. They are as follows:

A. Geology

It is commonly accepted, now (but not in recent history), among geologists and others that the current continents were **one land mass** in the past.⁷⁸⁵ This one land mass was propounded Snider-Pellegrini in 1858. He propounded that it broke apart to form the continents (**Figure 15a**). Earlier, Epigrams and Corcks in 1736 had also supported this one land mass concept, but had felt that the lands sank below the waters rather than the separating of the land (**figure15b**). These men were all believers in a worldwide flood. This one land mass eventually became connoted as “**Pangea**” by Wegener in 1912.⁷⁸⁶ It is now argued by secular scientists and has continued to be argued by Bible believing geologists, based on strata and fossil analyses, to have been one landmass and to have subsequently broken apart (**Figure 16, 17**).^{787, 788,789,790} Yet based on both scientific and

⁷⁸⁵ See Generalizability section under geology and plate tectonics.

⁷⁸⁶ A. Wegner, Pangea. Wikipedia online.

⁷⁸⁷ This is referred to in D. Lambert’s book *The Field Guide to Geology* (1988) on page 48 when he refers to land “coalescing” into Pangea and then it subsequently breaking apart.

⁷⁸⁸ There are common strata and fossils found on various now separated continents. The plant *glossopteris* from Permian designated strata, was one fossil form used by Wegener for the proposition of Gondwana. The *phytosaur* from the Triassic designated strata has been found in North America, Africa, Europe, and India. *Coelophys* has been found in the Southwest US and in Zimbabwe. There are many other examples.

⁷⁸⁹ The presence of other tetrapod reptile fossils such as the *Mesosaur* in Africa, South America, and North America argues for a land connection of these areas that had been covered by a muddy watery deposit (as the fossils are all in what appear to be flood deposited sediments). *Ginkgo* leaves, of very

scriptural analysis this concept had been propounded much earlier by scientists who were Christians.⁷⁹¹

similar structure found in designated Cretaceous strata in Montana, Eocene designated strata in British Columbia, and modern leaves in China argues for the connection of China and North America at one time, as well covered by a muddy flood deposition. By uniformitarian ages there should be a 100 million years between the two time periods and yet the structure of the leaves remained unchanged. This is unlikely to have occurred; there should have been significant changes over that time period. *Glossopteris* leaves, anatomically virtually identical, are found on all the southern continents of the present continental crust. This too argues for a unified land, having been covered by muddy flood sediments, subsequently broken into smaller land masses now widely separated by water. As well, there is an overlap of connecting northern and southern continents demonstrated by *Mesozoan* and *Phytosaur* fossils.

While it might be argued that the lack of complete uniformity of fossil and strata coverage over all continents supports the concepts of rising/falling local or regional seas, contracting/expanding continents; it can be explained another way. One huge initial land mass (Rodinia) undergoing progressing and regressing massive watery movements, with subsequent fracturing of these lands (Pangea during the Flood), and with mountain building could produce the irregularities seen in the sequencing of the worldwide geologic column. This is consistent with the Biblical scriptures in Genesis 7:17-8:7 (see comments by Kirby below). It is important within this context to mention the observation by H. Morris that no worldwide erosion surface has been found.

⁷⁹⁰ Lockley, M. and C. Meyer, *Dinosaur Tracks* (2000), on page 107 commented, "This phenomenon of small *Grallator* abundance was first noted by Harmut Haubold in the 1980s and appeared to be part of a global pattern. **A similar proliferation of small *Grallator* tracks has been reported from rocks of exactly the same age in western and eastern North America, as well as from many sites in mainland Europe, particularly in France, Germany, and Italy.** Given the uncertainty that attends the identity of the aforementioned Middle Triassic dinosauroid tracks, this Late Triassic small *Grallator* acme zone is probably the best footprint evidence we have that small bipedal theropods were well established over much of the Northern Hemisphere by this time."

⁷⁹¹ On page 385 Kirby stated, "In the seventh month of the deluge, as the same author observes, on the seventeenth day of the month, the ark rested on the mountains of Ararat, from which period the waters returned off the face of the earth, *going and returning*, as it is in the Hebrew, rendered in our translation by the word continually, but almost all the ancient versions adhere to the literal sense, which seems to be important, and to indicate a flux and reflux of the waters, which would affect the deposition of the matters floating upon or suspended in them." Kirby, W., ed., *The Bridgewater Treatises*, vol. 1, *On the Power, Wisdom and Goodness of God as Manifested in the Creation of Animals and in Their History Habits and Instincts* (London: William Pickering, 1835), 385. As well, Kirby chided his fellow Christian geology and philosophy colleagues on page 377, "My own knowledge of Geology and its principles, as now laid down, is too slight to qualify me to compare them with what has been delivered in Scripture on the subjects here alluded to; but as it appears to me that the scriptural account of the great Cataclysm has not been duly weighed, and its magnitude, duration, momentum, varied agency, and their consequences, sufficiently estimated by geologists, I will endeavour, as briefly as I can, to call their attention, and that of Christian Philosophers in general, to the most striking features exhibited by it, as found in the seventh and eighth chapters of the book of Genesis."

The spread of animal groups across vast areas of several continents can be explained as being due to the massive ebbing and flowing of the muddy slurries over the one land mass, prior to its breakup. This appears to be the language of Genesis 8:5. The word "continually" in the KJV is a compound of the qal perfect or active voice of **Hayah** (Strong's 1861), to exist; and the infinitive absolute as a complement of affirmation of **Halak** (Strong's 1980) meaning to walk, enter wander, wax, spread. See Zodhiates *The Complete Word*

The earth's continental crust is covered with layers of earthy material that appears similar to that seen from the residue of local flooding. But the expanse of individual layers of the geological record is massive and far greater than that seen from the residue of local flooding or volcanic action. Many of the layers of the Grand Canyon are 50-400 feet thick and cover thousands to hundreds of thousands of square miles. The layers are often fairly homogeneous while others are quite heterogenous, e.g. Redwall Limestone (easily seen in the Grand Canyon). There are no eye witness histories (apart from the flood stories of Mesopotamia) of current local flooding or volcanic activity having this sort of impact. As well, the Shinarump of the Upper Triassic is a thin (50 feet thick) gravel and sand layer that could have only been deposited under significant flow of water, and it covers much of the Southwestern United States.⁷⁹² The Coconino Sandstone, in the Permian, is up to 300 feet or more thick⁷⁹³ and covers an even greater area of the Southwestern United States (**Figure 18**), and the ingredients for it were probably moved long distances before it was deposited.⁷⁹⁴ As well, the interfaces with strata above and below the Coconino Sandstone show **no evidence of large time gaps** for erosion between surfaces but do reveal rapid watery deposition (**Figure 19**).^{795,796} There are no presently observed mechanisms by which such vast amounts of water could be generated to have moved these materials and deposited them as they are.⁷⁹⁷ As well, the

Study Old Testament. (See comment by Kirby below) All of this is consistent with the continental crust being of one area initially, and then breaking apart into the continents that are now present.

⁷⁹² See Generalizability section. Roth, A, *Evidences The Record and the Flood* (Loma Linda, CA: Geoscience Research Institute, 1990), VHS.

⁷⁹³ S. Austin, *Grand Canyon*, 1994, p. 36.

⁷⁹⁴ A.A Snelling, *Rock, Fossils, and the Flood* (Hebron, KY: Answers in Genesis, 2007), DVD.

⁷⁹⁵ Snelling commented, "Above the Coconino Sandstone is the Toroweap Formation and below is the Hermit Formation, both of which geologists agree are made up of sediments that were either deposited by and/or in water." A. Snelling, "Startling Evidence for Noah's Flood Footprints and Sand 'Dunes' in a Grand Canyon Sandstone," *Creation* 15:1 (1992), www.AIG.org/creation/v15/11flood.asp?vPrint=1.

⁷⁹⁶ S. Austin, *Grand Canyon*, 1994, p. 49-50.

⁷⁹⁷ A working hypothesis (per Discussion with Dr. A. A. Snelling): There was a cracking of the oceanic crust, resulting in the crust spreading apart with magma spewing forth to fill the gap and to create the oceanic ridges. As this magma poured forth the new warm basalt crust became less dense and thus

composition of the continental crust is entirely different from that of the current ocean floor crust. Some uniformitarian concepts have required the gradual sinking and then rising of an ocean basin with subsequent local deposition of strata and trapped life forms to explain the sedimentary layers on the continental crust. National Geographic seems to still take this position on its views of the Rift Valley.⁷⁹⁸ It is clear that this does not fit the observed data with vast laminar layers of strata covering the entire continental crust and marine animal life trapped in it with animals of terrestrial origin. Their deposition is more consistent with being buried and deposited under rapid massive watery conditions not seen today.

Erosion of the present land surfaces plays an important part in the movement of earthy materials. There are a few areas where rapid erosion may have occurred over much lesser but still widespread areas, such as in the Niagara Escarpment in Canada, and these are thought to be due to the breakdown of ice blockages at the end of an Ice Age.⁷⁹⁹ This supports the concept of the movement of large amounts of sediments by water action—but falls far short of that seen in the geologic record. Throughout the land masses of the earth are evidences of massive erosion and buckling of strata in the past that are not

lighter and began to rise. This as well as tsunamis generated by the earthquakes caused enormous surges of water to move away from the oceanic ridges and onto the continental crust. It carried ocean sediments with it, and mixed and deposited it on the continental crust along with the soils and surface material found there. With cooling the oceanic crust would become denser and sink, so that the waters on the continental crust would rush off resulting in tremendous erosion and an initial deposition of large amounts of sediments in the ocean. (See L.Vardiman(1996) *Sea-Floor Sediment and the Age of the Earth*. Institute for Creation Research, ElCajon,CA.) Plate tectonics (See Baumgardner in the Generalizability section) caused cracking, rapid horizontal crustal plate movements, and subsequent colliding of the fragmented continental crust, which would generate mountain belts in the late Flood period. (See J. Baumgardner *Recent Rapid Uplift of Today's Mountains*, Impact #381, Institute for Creation Research, El Cajon, CA.) Others conjecture that tremendous volumes of water were sent into the atmosphere and subsequently precipitated as heavy rains during the heating of the oceans during the flood. (See L.Vardiman (2001) *Climates Before and After the Genesis Flood*. Institute for Creation Research, El Cajon, CA. See also below.

⁷⁹⁸ Natl Geographic: see online numerous programs on the formation of the Great Rift Valley. The view that the Red Sea may be the result of rifting is probable, but it does not explain the fossil evidence seen on the land.

⁷⁹⁹ E. Silvestru, "Catastrophic Subglacial Drainage and Rapid Landscape Formation in Canada, with Special Emphasis on the Niagara Escarpment," in *Proceedings of the Sixth International Conference on Creationism held in Pittsburgh,PA, August 3-7, 2008*, ed. A.A. Snelling (Pittsburgh,PA: Creation Science Fellowship and the Institute for Creation REsearch, 2008), 357-370.

consistent with processes of today (**Figure 20, 21**).⁸⁰⁰ Current rates of river erosion do not demonstrate an adequate mechanism for the kind of erosion seen in the geological record.⁸⁰¹ It has been demonstrated historically that Christian geologists recognized that the strata found throughout the earth were consistent with a massive worldwide flood with erosion and buckling of the strata (**Figure 22**) and not just local streams as predicted by the uniformitarian philosophy.^{802,803,804} Sherwin and Thomas⁸⁰⁵ have nicely summarized the strata of the earth and placed it within a universal flood context (**Figure 23**).

J. Baumgardner has computed how the continental crust of the earth might have been overflowed, but under dramatically different conditions than today.^{806,807} Per his model, a massive breakup of the mid-oceanic areas occurred and this released large amounts of steam in supersonic jets that carried ocean water high into the atmosphere that then fell as heavy rain. As well, water would have surged onto the continental crust, similar to

⁸⁰⁰ See Generalizability section under geology for discussion regarding the Chinle and Moenkopi formations in the Utah, Arizona, and New Mexico region.

⁸⁰¹ These authors review the creationist views on the formation of the Mississippi River delta. While there is a variance of view as to where the demarcation is between flood and post flood deposits, the current deposition of the delta flood plains can be accommodated within the last 5000 years. As well, it is recognized that huge volumes of sediment must have been deposited during the active phases of the flood, of which the volumes of those sediments are far greater than those deposited post-flood. Froede, C.R. and J.K. Reed, "Assessing Creationist Stratigraphy with Evidence from the Gulf of Mexico," *Creation Research Society Quarterly* 36(2) (1999), <http://www.trueorigin.org/cfjrgulf.asp>.

⁸⁰² See Steno.

⁸⁰³ See Burnet.

⁸⁰⁴ See Catcott.

⁸⁰⁵ In their summary of the strata of the earth the Paleozoic, Mesozoic, and parts of the Upper Proterozoic and Tertiary are the residue of the flood with its rising and falling properties. F. Sherwin and B. Thomas, "Understanding Evidence for the Biblical Timescale," *Acts and Facts* (April 2010): 16-17.

⁸⁰⁶ J. W. Baumgardner, "Catastrophic Plate Tectonics: The Physics Behind the Genesis Flood," in *Proceedings of the Fifth International Conference on Creationism held in Pittsburgh, PA, August 4-9*, ed. R.E. Walsh (Pittsburgh, PA: Creation Science Fellowship, Inc, 2003), 49-62.

⁸⁰⁷ J. Baumgardner, "Computer Modeling of the Large-Scale Tectonics Associated with the Genesis Flood," in *Proceedings of the Third International Conference on Creationism held in Pittsburgh, PA, July 18-23*, ed. R.E. Walsh (Pittsburgh, PA: Creation Science Fellowship, Inc, 1994), 49-75.

tsunamis of today, but of orders of magnitude greater strength. The rain and the ocean based waters would have ebbed and flowed across the land mass, animals fleeing as it increased. During the Flood, oceanic ridges would have formed and expanded, pushing aside the old ocean crust. Thus the spreading ocean crust would have flowed with the continental land mass, resulting in the oceanic layer being pushed below the continental crust (or subducted) because of its greater density. This pressure would have begun to break the single unit of land into large fragments along the collision zones. These fragments would have collided and begun to buckle to form mountain ridges along the coasts. As there are sedimentary strata in most mountains of the world this buckling would have to have had its onset well into the flood sedimentary process, but prior to the final hardening of the strata. It probably continued even after the flood abated. Uniformitarians, those arguing for a long age of the earth and the gradual deposition of strata (in contrast to that described by Noah) have begun to acknowledge that the continents have undergone “violent” development.^{808,809}

There are vast **fossil graveyards called death assemblages (Figure 24)**,^{810,811} which are found worldwide and in virtually all sedimentary strata.⁸¹² There are large numbers of

⁸⁰⁸ Simpson, S., "Violent Origins of Continents," *Scientific American* (January 2010): 60-67.

⁸⁰⁹ P.B Keleman, "The Origins of the Land under the Sea," *Scientific American* (February 2009): 52-57.

Scientific American, in its ongoing defense of long ages for the earth and in support of its evolutionary stance produced the two recent articles on sea floor and land formation. Both *Scientific American* articles harken back to the vulcanist position of the late 1700's to 1800's. Sea floor spreading due to volcanic activity can be measured (see Baumgardner references in this dissertation), but the concept of repeated meteorite strikes forming volcanic islands is still conjecture. As well, repeated these repeated strikes becomes a necessary process to defend the view of repeated flooding and destruction of life over the entire earth across long ages. But it is important to note that these uniformitarian scientists acknowledge the catastrophic construct of the earth's surface. This data can be put into the Noah Flood story as easily as into the long age gradual development of the earth and life (see A. Snelling references this dissertation). Often scientific evidence is affected by one's interpretive framework for science.

⁸¹⁰ Horner and Gorman found a "death assemblage" of an estimated 10,000 (up to 30 million fossil fragments) *maiasaur* individuals in their excavations in the Montana badlands. They commented that no bones had been chewed on, that broken ones were sheared longwise or in half, and all were oriented in an east west pattern. There were no baby bones in the batch. They concluded that the bones were buried in a muddy layer below a volcanic ash layer. Their explanation for how this occurred is lacking—they commented that they, the entire "herd" were first "gassed" by a volcano, then they laid dead in a large area and rotted with some decomposition of the bones, then a massive flood covered the entire area and further volcanic activity occurred afterwards. A more simplistic and likely explanation is that these dinosaurs

animals both marine and land dwelling deposited together.^{813,814} As well, there are large seams of coal that represent huge amounts of relatively homogenous vegetative matter that were rapidly compressed together.⁸¹⁵ These are not likely the result of occasional animals dying and falling into the water and being transported to a sequestered lagoon, and the slow aggregation of organic matter in marshes.

The findings, worldwide, of large intact tree trunks (fossilized) but stripped of branches, roots, and bark are consistent with harsh destruction and rapid deposition. The only type of catastrophic events occurring today consistent with these sort of findings are those of the blast zone below volcanoes like Mount Saint Helens (**Figure 25, 26**), and possibly high volume, high velocity flooding such as seen in the Johnstown PA flood of 1889. In contrast, the findings of the Tsunami 2004, the local Potomac floods, or of Hurricane Katrina do not usually show this sort of destruction, and the findings of these sort of lower intensity events are not consistent with much of what is found in the fossil record. The fossil record of trees is most consistent with the burial of the trees having occurred in

herded together, an uncommon habit for reptiles (except in a catastrophic condition), as they fled from flooding sediment saturated waters and were crushed, disarticulated, and buried together, and then they were covered by volcanic ash that continued to decompose the fleshly parts. Regardless of which scenario is correct, they do appear to have been buried in a massive muddy catastrophic condition. J. R. Horner and J. Gorman, *Digging Dinosaurs* (New York: Workman Publishing, 1988), 117-139.

⁸¹¹ Bristowe, A. and M.A. Raath, *Palaeont. Afr.* (2004), p. 32. These authors stated regarding *Coelophysid* deposits from both the Southwest United States and Zimbabwe, “one of the distinctive characteristics of coelophysid deposits in both geographic locations is that they represent mass burials.... These mass burials occur in a variety of depositional environments... all localities suggest water-borne deposition of the vertebrate remains. By virtue of the number of individuals found at the Ghost Ranch and Chitaski River sites, it can be concluded that these were catastrophic mass death events.” However, these authors argued for local events, and not a worldwide one.

⁸¹² A few examples: *Mososaur* (Cretaceous) aquatic; *Phytosaur* (Triassic/Jurassic) land dwelling.

⁸¹³ This is rarely reported in the literature, but I have talked with workers excavating in the Chinle Formation both at the Ghost Ranch site and one in Arizona who have told me that both aquatic and land forms of fossils are found mixed together in the clayey ash composed strata.

⁸¹⁴ It is significant to realize that vast numbers of intact aquatic as well as terrestrial organisms are buried (often in ‘death assemblages’) in strata across the whole earth’s continental crust. This is most easily understood as a massive watery catastrophe. Two examples would be the *Mososaur* (aquatic) and the *Phytosaur* (terrestrial).

⁸¹⁵ Snelling, *Rock Strata, Fossils, and the Flood*, DVD.

high velocity, high volume watery destructive flood events. That these kinds of findings are distributed over the earth's continental crust and in different strata is supportive of a worldwide flood. Fossil trees from the Petrified National Forest Park have many similarities to those who that have been destroyed by local violent forces such as the non-fossilized trees from the blast zone at the Mount Saint Helens volcanic eruption (**Figure 25, 26**). Yet fossil trees that are so common in the PNFP are also found throughout the Southwest and other parts of the U.S. and in different levels of strata (depending on the group, **Figure 27**).

While there tends to be a progressive pattern to the presence of fossil life forms from more aquatic to land dwelling ones throughout the strata of the crustal continents, it has been shown that there is much overlap among similar representatives throughout the range of strata and that there are not clear examples of progressive lines of assumed progenic associations of fossil life forms between those of "older" or deeper and more superficial or "young" strata. As well, the "Cambrian Explosion" is demonstrable evidence against this, and is comfortably assimilated into flood geology. Regarding this issue Dr. Snelling has stated, "The conventional explanation of the fossil order is progressive evolutionary changes over long periods of time. But this explanation runs into a huge challenge. Evolution predicts that new groups of creatures would have arisen in a specific order. But if you compare the order that these creatures first appear in the actual fossil record, as opposed to their theoretical first appearance in the predictions, then over 95% of the fossil record's 'order' can best be described as random. On the other hand, if these organisms were buried by the Flood waters, the order of first appearance should be either random, due to the sorting effects of the Flood, or reflect the order of ecological burial. In other words, as the Flood waters rose, they would tend to bury organisms, in the order that they were encountered, so the major groups would appear in the fossil record according to *where* they lived, and not *when* they lived. This is exactly what we find, including this fossil record within the Grand Canyon-Grand Staircase."⁸¹⁶ Wise has also commented on the completeness of the fossil record.⁸¹⁷ As

⁸¹⁶ Snelling, A.A, "Order in the Fossil Record,"

well, many “living fossils” (**Figure 28, 29, 30**) with similar form are found at different depths of strata (e.g. “times”) and continents. The conservation of life forms over long times and distribution over vast areas would not be expected. It better supports a short time period and localized aggregation of life on earth prior to The Flood. As well, these “living fossils” are the only representatives of broader groups of fossilized organisms.⁸¹⁸ This would be consistent with the magnitude and impact of the worldwide flood on animal and plant life.

There has been remarkable data obtained from C¹⁴ dating that is consistent with the rapid and sequential deposition of water laden strata in the geological record. The C¹⁴/C ratios from different strata dated at 1.6-360 my were found to be the same. This was true whether coal or other fossil material was used (**Table 3**).

The continental crust geologic record can be interpreted as have been covered with muddy water slurries that were deposited rapidly and sequentially. This can explain all the sedimentary strata seen. Its deposition was rapid and massive, so that vast areas of the earth contain large areas of relatively homogenous layers that show no or little erosion surfaces between strata. Many of these layers contain large amounts of life forms, from different ecologic habits crushed and mixed together. Many fossil tree shapes are consistent with having been blown down under forces similar to the Mt. Saint Helens blast zone, and are often covered in clayey ash layers that would have come from

Answers Magazine 5:1 (2010):64- 70.

⁸¹⁷ Wise, K., “The Completeness of the Fossil Record”, 2010, 70. Wise commented, “So, do we have any way to test these two predictions? Has the fossil record preserved most of the species of the past, as expected by young-age creationists, or has the fossil record preserved a very small percentage of past species as expected by those who believe the earth is old? One way to determine how good the fossil record is at preserving species is simply to count how many living species are also known as fossils, regardless of whether the fossils were made before, during, or after the Flood.... Bjorn Kurten determined that 88% of the mammal species living in Europe today are also present in the fossil record in Europe, and 99% are present in the fossil record somewhere on earth. In another study J.W. Valentine, in his PhD dissertation, found that 78% of the marine mollusk species currently living along the southern California and Baja California coast are also found in the fossil record. These studies suggest that the fossil record is good at preserving past species- much closer to the expectations of young-age creationists than the expectations of those who believe that the earth is old.”

⁸¹⁸ For examples: the Nautilus representing the nautiloids; the *Gingko bilboa* representing the gingkoids. Note there can be difficulty as to what fossilized life forms are actually the genetically “related” other forms of somewhat similar structure.

volcanic activity. This kind of evidence is found all over the earth. Radiometric (C^{14}) analysis can be interpreted to give a young age for the earth and for little difference in the relative ages between strata that have in the past been given vast age differences. These data are consistent with a worldwide flood as described in the Noah flood account.

Sub-summary

The various fields of geology give great support to the concept of a past world-wide flood. Seventy to eighty percent of the crustal land of the continents contains sedimentary rock whose formation is most consistent with massive muddy slurred deposition.⁸¹⁹ There are now experimental mechanisms to explain how the waters of the oceans could have covered the earth in one rapid massive continuous action. Most of the stratigraphic layers contain massive amounts of crushed mixed habitat organisms. Most of the great life groups, phyla, and which are still present, are found at the lower levels in the Cambrian without any predecessors. Current radiometric dating, C^{14} gives similar dates of ages for widely separated strata. All of these findings can be best understood within the expected results of a massive world-wide flood that rapidly and sequentially deposited multiple layers of debris laden material over the entire land surface of the earth; and which subsequently flowed of the earth causing great amounts of erosion. The current earth is now in a post-flood state.

⁸¹⁹ The present comments have been echoed by others in the past. Carpenter, in 1836, stated, "The changes and ravages of Nature correspond with the impetuous force of the flood...How tremendous must be the idea of the deluge descending from promontories so elevated! How profound must be the guynes and abysses they would work by the impetuosity of their cataracts! But it is also to be remarked, that all these contour and daring cliffs have remained much the same since the deluge:... It is therefore apparent, that whatever earths the impetuous tides of the deluge washed from one place, they must of necessity deposit in another. This is an invariable law of the ocean. Hence, one tide would bring gravel and marine exuvia, already worn by the action of the billows rolling on the shore; another would bring sand, and a third clay. But though all alluvial strata were formed of the detritus of the old earths, they would repeat the first formation by combination. They would change into a variety of silica, rocks, marls, and minerals; and all the more loamy earths, by the gradual retreat and subsiding of the waters. These long-continued actions and deposits of the water are a sure guide in accounting for all the conformations and heterogeneous masses found in most parts of the earth. This idea, that the deeper alluvial strata were laid on by increasing tides, assists us to account for the deposit of coal. This is confessedly a vegetable fossil; and, from the purity of its beds, we have the surest grounds of conclusion that it once floated upon the sea." W. Carpenter, *Scripture Natural History* (London: Book Society for Promoting Religious Knowledge, 1836), 11.

B. Biology

1. mtDNA data support the common origin of man and woman from a small group, i.e. less than ten individuals (estimates are about 6), and of recent expansion from this group from the Middle East area. (**Figure 31**) This was derived by comparison of DNA sequence similarities among various breeding populations.⁸²⁰
2. The study of animal groups (Baramins) which may be equivalent to the family level classification, their wide diversity of shapes and ability to hybridize, make feasibility of placement on the ark more understandable.⁸²¹
3. The distinctness of animal groups continues to be supported by DNA sequencing.⁸²² This supports the concept of individual males and females from each group having been taken aboard the ark. Calculated mutation rates based on observed intra-species differences argues for a recent, thousands of years, existence of these individual groups.⁸²³

These observations are supportive and consistent with a world- wide flood such as that of the Noah flood story.

C. Anthropology

1. **Most if not all the cultures of the world have a flood story that is uniform in four to seven of its characteristics:** 1) a god or gods are angry with mankind, 2) a favored (righteous) man and his family (or close friends) are saved in a boat or other vessel, 3) some animals (and in one story plants) are rescued as well, 4) all the others die by a watery flood, 5) the boat lands on a mountain, 6) the earth dries up,

⁸²⁰ See section of Generalizability.

⁸²¹ See discussion on Baramins in both Determinancy and Generalizability sections.

⁸²² The recent studies comparing the actual sequences between man and ape are an example—as summarized by Tomkins and Thomas, *Acts and Facts* (2010) 4-5.

⁸²³

7) after the man left the boat a sacrifice was made to the god or gods (**Table 4**),^{824,825} and 8) the man began replanting and repopulating the earth. The recognition of common flood stories from other countries has been acknowledged at least since the time of Josephus in his *Antiquities of the Jews* written about 93 A.D.⁸²⁶ He mentioned that “Berosus the Chaldean” said a ship landed in Armenia and that people still were taking bitumen from it when he (Berosus) wrote about it. He stated, “Hieronymus the Egyptian, also, who wrote the Phoenician Antiquities, and Mnaseas, and a great many more, make mention of the same. Nay, Nicholas of Damascus, in his ninety-sixth book, hath a particular relation about them, where he speaks thus: ‘There is a great mountain in Armenia, over Minyas, called Baris, upon which it is reported that many who fled at the time of the Deluge were saved; and that one who was carried in an ark came on shore upon the top of it; and that the remains of the timber were a great while preserved. This might be the man about whom Moses, the legislator of the Jews wrote.’”⁸²⁷ This is a powerful testimony to the unity and central development of mankind. It is most consistent that mankind developed in the Middle East and that mankind spread from there.⁸²⁸ As well, this flood was of such impact that all, if not most all, cultures have carried it with them into whatever lands they have migrated to (**Figure 32**). There are some stories that

⁸²⁴ J. Bergman, "Do Creation and Flood Myths found Worldwide have a Common Origin?," in *Proceedings of the Fifth International Conference on Creationism held in Pittsburgh, PA, August 4-9*, ed. R.E. Walsh (Pittsburgh,PA: Creation Science Fellowship,Inc, 2003) 517-528.

⁸²⁵ A. Custance, "Flood Traditions of the World," in *A Symposium on Creation Volume 4*, ed. D.W. Patten (Grand Rapids, MI: Baker Book House, 1972), 8-44.

⁸²⁶ Josephus, *Josephus The Complete Works*, trans. W. Whiston (Grand Rapids, MI: Kregel Publications, reprint 1974), Chap. 3:3:4-5, page 29.

⁸²⁷ It should be noted that this ancient writer attributed the writings regarding Noah to Moses. As well, he and the story of Deaculion may imply that not all mountains were covered, as is seen in some of the other flood stories. (These may represent local events or a distortion of the Noah flood account). Yet, the devastation is profound and the event is called the flood. As will be further discussed many other flood stories and the structure of the Genesis flood story argue for a complete inundation of all mountains and the whole earth.

⁸²⁸ This is only partly addressed in this thesis, but it is commonly accepted that mankind developed in the Middle East. Evidence that supports this is: 1) The most ancient documented flood stories, in a written form, are from Mesopotamia. 2) Mitochondrial DNA supports “Eve” coming from it. 3) Archeology demonstrates the earliest sophisticated societies are from the Middle East. 4) Linguistic evidence supports that man crossed from China to the North American continent (see below).

may relate to local floods but most are clearly related, in context, to those describing “The Flood”. Roth has commented that, “some 270 flood stories have been recorded around the world.”⁸²⁹

Albert Clay, in the early 1900’s, argued for a central genesis of the flood story and that it was originally developed in a Semitic language, i.e. Hebrew or Amorite. He gave linguistic evidence for it having come from the western area of the Middle East. It was subsequently carried into Southern Mesopotamia, and other areas (such as Canaan).⁸³⁰ Other archeological evidence has demonstrated that the written transmission of the flood story has been passed down to our present times (**Figure 33, 34**).

Many attempts have been made by secular historians to discount the veracity of the universality of the flood stories. In 1883 E. Thurn wrote a work *Among the Indians of Guiana*. In chapter 18 he dealt with folk-lore. In this chapter he flatly denied that

⁸²⁹ He referred to an article by H.F. Vos on the Flood (Genesis) in the International Standard Bible Encyclopedia Vol. 2 (1982) pages 319-321. A.A Roth, "Flood Stories—Can They Be Ignored?" *Origins* 17(2) (1990).

⁸³⁰ Clay, A.A., *A Hebrew Story In Cuneiform*. In his Forward Clay states, “ The title of this little monograph tells its own story, namely, that an ancient Hebrew deluge tradition written in cuneiform is here presented. It is not a recent discovery, nor is it the first time that it has appeared in print. . . . This story of the deluge which had found its way into Babylonia, where it was made to conform largely to the Akkadian dialect, fully betrays its origin; it came from the same source whence the Hebrew traditions came, namely from the people who lived in Amurru (Syria and Mesopotamia), called the Amorites. As was the case in pre-Mosaic days, and to a large extent in early Israel, when henotheism prevailed, “God” is the foremost deity. We learn from this tradition, and also from its redaction written centuries later, that a long famine preceded the deluge, which is not referred to in the Old Testament, that the famine had been sent because men had multiplied, and also because of their clamor, reminding us of the causes given for the deluge in the Old Testament. **The great importance of this inscription which was copied about the time of Abraham from an older tablet, together with other facts here presented, is that it will require that the prevailing view be abandoned that the Hebrew traditions were borrowed from Babylonia. This involves many scholarly works written in the recent decades upon the history of Israel.**” He also stated on page 27, “In 1909 the present writer endeavored to show that the **Babylonian origin of the Biblical deluge stories was without any foundation; but that they were indigenous to the West; and that, on the other hand, the Babylonian story of the deluge, as preserved in the Gilgamesh Epic, contained West-Semitic elements; showing that no other conclusion could be arrived at, but that extensive influences had been felt from the Amurru.** The arguments for these views were based almost entirely upon such literary evidence as the names of the gods, who were mentioned in the story, as being Amorite, as well as the name of the pilot of the ship, Buzur-Amurru. In the above discussion additional proof is offered from a linguistic point of view for this thesis.”

the stories of a Genesis like flood could possibly be related to the histories that the Indians carried themselves. He stated that any semblance to the Genesis Flood had to have come from Western missionaries. The Indians, because of their primitive state, were he stated: “The Indian mind is like a highly polished mirror which reflects all that it is shown.”⁸³¹ Thus, according to Thurn they simply accepted it. This is of course is grossly wrong, for if this were true then why did missionaries have such difficulty penetrating many of these groups (who had flood stories) with the Gospel.⁸³² Earlier in the 1800’s another author addressed this same issue. Fairholme, 1833, stated, “But the most extraordinary traditional evidence of this event [the flood], comes from quarters where it could be least expected, and is consequently of the greater value, as it could not have been handed down by any other means than oral tradition, from one generation to another. Some of the

⁸³¹ On pg 372 Thurn stated, “Before telling any tales of the former of these kinds something must be said as to how far they are probably of genuine Indian origin; for some of those which have been recorded have undoubtedly been much affected by European influence; for example, in many of the tales there are points which in a very marked manner recall incidents belonging to Christian mythology, especially incidents of the Creation and of the Flood. It is not here necessary to make more than a passing allusion to the theory based upon these supposed common points, of the common descent of the Indians and of the rest of mankind from the actors of Genesis; for these apparently common points are themselves of very suspicious origin. It is true that they appear in the legends as the Indians themselves tell them at the present day; but it does not by any means follow from this that these details belonged to the tradition before the discovery of America. **The Indian mind is like a highly polished mirror which reflects all that is shown it.** If we can imagine such an incident as a civilized man glancing for the first time into a mirror, we must remember that at the first glance the man would realize the exhibition, not of glass, quicksilver, and certain optical laws, but of a duplicate of himself. So the student of Indian thought at first is apt to see not such things as the Indian thinks, but such things as he, the student, thinks. **A partial explanation of this is that the Indian, unlike the civilized man, knows nothing of the supernatural or impossible, and is fully prepared to believe in the existence of everything even that he has not seen; so when told by the European of the facts, simple or complex, of Christian theology, he undoubtingly and without the least mental effort assents to their existence...** (pg373) a very large proportion of those Europeans who have been much in contact with the Indians and have recorded their folk-lore, have, whether nominally missionaries or not, been more or less inspired by the purposes of the Christian missionary; and these have rejoiced to find the Christian traditions which their own forerunners had poured into the Indian mind. Every allowance must therefore be made by the scientific student of folk-lore for the extreme probability that these missionaries have very often mistaken such mere reflections for realities... (pg. 376) From the folk-lore now to be told an attempt will be made to exclude, as far as possible, all that is of doubtful Indian origin...” **He thus choose to exclude recording anything in the culture that he thought might have similarities to the Judeo-Christian histories.** E.F Thurn, *Among the Indians of Guiana* (London: Kegan, Paul, Trench and Company, 1883), 372, Google online accessed 2008.

⁸³² See Indian Tribes of Guiana by W.H. Brett written in same time period.

inhabitants of Otaheite [Tahiti]⁸³³, on being asked by one of our circumnavigators concerning their origin, replied that their Supreme God, having, a long time ago, been angry, dragged the earth through the sea, when their island was broken off and preserved.”⁸³⁴ In conflict with this, in recent times the well known Assyriologist Dalley, in reviewing the various Near East stories of the Flood, stated: “In Phrygia, where the hero is named on coins as Noah, the tale may have been attached at a later date to heroes of much greater antiquity. Where Flood stories are found in other parts of the world, missionaries and early Christian travelers may have disseminated them; there is no reason to suppose that they are indigenous.”⁸³⁵ This is presented even though it is commonly stated by the indigenous people themselves that the stories of the flood had come to them from their ancestors (see above). Ragozin, in 1902, makes an interesting comment in regard to this issue.⁸³⁶ He stated on page 335 of The Story of Vedic India the following: “The story of the Flood exists in Hindu literature... These versions (which included a flood story) have been known to Sanskrit scholars for half a century and more, but being found imbedded in such a late, and in some cases almost modern body of literature, representing Hinduism even more than classical Brahmanism, those who had detected the foreign ring of the story were naturally led to attribute it to late Semitic importation, directly connecting it with the Biblical account in Genesis. The

⁸³³ It is thought to have been populated by Polynesians in AD 300-800. The Island was visited by a French explorer Louis-Antoine deBougainville in 1768. Capt. Cook arrived in 1769. Thus, the time between Capt Cook’s visit to the Otaheite and the first documented visit by a European (not just sighting) is only one year. It is not reasonable to assume that the Tahitians would so soon forget their own history and assimilate the European one. Thus the testimony appears reliable. For historical information see *Wikipedia* "Tahiti.", Wikipedia online accessed 2008.

⁸³⁴ G. Fairholme, *General View of the Geology of Scripture* (London: James Ridgway, 1833), 131-132.

⁸³⁵ S. Dalley, *Myths from Mesopotamia*, 7-8. As well, she explained on pg.7 that the idea of a universal flood may have arisen at “a time when there was no concept of how geological change took place, nor of how vast was the time-scale of evolution, moreover when the creation of man was generally supposed to have accompanied the creation of the earth in its present form, an enormous flood which man by chance survived would be the only way to account for the presence of such marine fossils, and may have been thought up by more than one inquiring mind.” She simply affirmed the secular mindset of Thurn.

⁸³⁶ Z.A. Ragozin, *The Story of Vedic India* (New York: G.P. Putnam's Sons, 1895), Chapter 8:335, Google online accessed 2008.

surprise was therefore great when a version came to light in one of the great Brahmanas, the SHATAPATHA (“Brahmana of A Hundred Paths”), suddenly removing the legend into an age closely bordering the Vedic, in which we find it presented, in a monument of distinctly Vedic literature, as an ancient legend accounting for the origin of the present human race.” Thus he revealed the skeptical view of the times, still prevalent, yet it was overturned when other documents were found. Again, there are the documents of ancient writers like Josephus and the testimonies of isolated Island groups like the Otaheite which corroborate and affirm that these testimonies are unlikely to be the result of Christian missionaries. As well the likelihood of independent composition is strongly unlikely because of the 5-8 or more points of commonality (**Table 4**)⁸³⁷, and Strickling has shown this to be statistically significant.⁸³⁸ The evidence is more supportive of a common source for “The Flood Story” that was then adapted to the local culture. It is not supported that distant cultures did not have a massive flood tradition until missionaries arrived. The assumption of missionary based spread of the story has arisen from a particular secular viewpoint of man.

Many of these widely dispersed groups, around the earth, have used names for Noah from their own language, i.e. the “wisest one”, but still he was a man who found favor with the god(s) from the wrath to come. The mountain was often named after a local one. A large canoe might be used to describe the ark. It appears that many cultures may have carried this story orally, as they did not appear to have a written language until more modern historical times.⁸³⁹ If so, then with the substitutions the story would have been more easily understood and transmitted from generation to generation. Nonetheless the common denominators are: 1) men upsetting the god(s) usually through sin; 2) the god(s) deciding to destroy men; 3)

⁸³⁷ See page 333.

⁸³⁸ J. Strickling, "A Statistical Analysis of Flood Legends," *Creation Research Quarterly* 9:1 (1972).

⁸³⁹ It is possible that they had lost writing in the midst of their migrations, or that their fore-fathers had left Mesopotamia before the development of writing.

one man finding favor with a least one of the god(s); 4) a structure (boat) built to house the man (and usually his family) and some animals (and in one case plants) to protect him (them) from a watery catastrophe that destroys the rest of man; 5) as water recedes the protective structure (boat) settled on a mountain; 6) the man (and his family) leave the boat and repopulate the land; 7) and make a sacrifice to the god(s). However, as would be expected, in cultures where the story was transmitted by oral routes, the distortion of the true account would likely be increased with the passage of time.⁸⁴⁰

Yet, the Table of Nations described in Genesis 10 supports the idea of people groups carrying the flood story with their group as they migrated away from the Mesopotamian Valley (**Figure 35, 36, 37**). Three of the major families of languages follow the pattern of dispersion. These are: 1) the Indo-European which is found in European countries, Siberia, and into Northern India, 2) The Afro-Asian found on the African Continent and the Sinai Peninsula, and 3) the Sino-Tibetan found in Southern India, the Pacific Islands, China, and by extension through the Ket language into the Athabaskan language groups into North America (**Figure 38**).⁸⁴¹ Hieroglyphics, as well, are found in Central America, China, and Egypt. There may be a connection between these forms of writing (**Figure 39**).^{842,843} All of these observations are consistent with the dispersal of mankind from one locality—that being from the Mesopotamian Valley, and the early written documentation of the flood story. When the data of the mtDNA, Table of Nations of Genesis 10, and the distribution of 3 major language groups are combined a clear overlap can be seen (**Figure 40**). This is strong support of the origin and distribution of mankind from the Middle East—a concept documented by the basic Flood narrative.

⁸⁴⁰ One remembers the simple classroom experiment where a first student whispers a story in the ear of the second and then the second whispers it to the third and so on till the last student hears it and recites it. The first and last versions of the story are usually different.

⁸⁴¹ Dene-Yeniseic Symposium 2/26-29, 2008.

⁸⁴² A. Kircher, *China Illustrata*, 1677. He argued for the common association between Egyptian and Chinese hieroglyphics.

⁸⁴³ Dragon motifs are common in China and they are present in Central America.

2. Common Technologies

There are technologies that would seem reasonable to assume that different groups of mankind could have developed independently such as the throwing stick, pottery, grinding stones and certain forms of housing. But other items such as the boomerang or adaladal, pyramids, and similar religious art motifs such as anthropomorphic figures would seem to argue for a common ancestry of mankind (**Figure 41**). A common ancestry would be supportive of the Noah flood story.

The idea of a great “dragon” and the art reflecting this is found in many of the ancient cultures (**Figure 42**). There are some who have attempted to associate this with the so-called komodo dragon (lizard).⁸⁴⁴ The images and descriptions from Mesopotamian⁸⁴⁵ and Chinese literature⁸⁴⁶ do not support this claim. These “dragons”, their stories found throughout the world, were much more powerful and of some religious significance.⁸⁴⁷ The use of the “dragon” motif in the Bible is vividly portrayed in the Book of Revelation chapter 12 (**Figure 43**).⁸⁴⁸ There is as well, the “horned serpent” image found throughout the cultures of the world. It is often associated with a flood event brought on mankind by a deity (**Figure 44**). It appears to be different from the dragon motif. Yet these unique descriptions are

⁸⁴⁴ Komodo dragons are venomous and have occasionally attacked humans. Britannica Encyclopedia online- Accessed 4/4/12.

⁸⁴⁵ Tiamat the “chaos” monster of Mesopotamian Lore. Wikipedia accessed 4/4/12.

⁸⁴⁶ “In [Chinese art, dragons](#) are typically portrayed as long, scaled, serpentine creatures with four legs.... Chinese dragons traditionally symbolize potent and [auspicious](#) powers, particularly control over water, rainfall, hurricane, and floods.... Wikipedia accessed online 4/4/12.

⁸⁴⁷ P.S Taylor, *The Great Dinosaur Mystery and the Bible* (San Diego, CA: Master Books, 1987), 36-49.

⁸⁴⁸ The KJV states, “And there appeared another wonder in heaven; and behold a great red dragon, having seven heads and ten horns, and seven crowns upon his heads. And his tail drew the third part of the stars of heaven, and did cast them to the earth: and the dragon stood before the woman which was ready to be delivered, for to devour her child as soon as it was born... And the great dragon was cast out, that old serpent, called the Devil, and Satan, which deceiveth the whole world: he was cast out into the earth, and angels were cast out with him.”

supportive of the commonality and origin of all mankind. It is also supportive of the likelihood of some dinosaurs, who survived the flood, being seen by mankind in the early post-flood period.

Sub-Conclusions on Generalizability in the Discussion

There are observations of science which are consistent with the concept of a worldwide flood:

- 1) At one time massive muddy slurried sediments were continuously and sequentially laid down by ocean waters over vast areas continental crust that broke apart from one land mass. (It is remarkable that the Biblical narrative predates by at least 3000 years any widely accepted scientific evidence for one original land mass.)
- 2) Large numbers of animals and plants died in the flooding process, and many if not most were crushed together into “death assemblages” and then rapidly buried.
- 3) This continental crust landmass broke apart into several small continents and subsequently collided rapidly to build mountains during this period.
- 4) Cultures all over the world speak of this event, with stories that match in 5-8 particulars. This is consistent with each as being derived from a common source.
- 5) Per the flood story only a few individuals-animals and humans were saved. This is consistent with current mtDNA and classification studies which support that the human population, as well as other animal groups, recently expanded from a small nucleus. All races and tribes in the current populations derive from this. It appears, from these scientific studies, that the flow of mankind was directed out from the Mesopotamian Valley.
- 6) Language groupings tend to support a divergence of mankind from a common source in the Mesopotamian Valley.
- 7) There are similar technologies found in widely separated people groups that support the concept that mankind has derived from a common source.

- 8) It is significant to note that there are examples of plant and animal deposition and subsequent fossilization which occurred in relatively uniform patterns across continents (now separated by vast oceans). These often occurred in the same general strata (i.e. “time period” such as the Jurassic, Triassic, and Devonian. There are some examples in this present writing). As well, there were examples given of life forms that spread across stratigraphic boundaries. The pattern is in contrast to the apparent spread of mankind from a focal point in the Middle East into the other lands of the earth (as determined from mtDNA, Language, and the historical account of Genesis 10; **Figure 45**).
- 9) There is a precise timing of the events that correlate with geological, Bible descriptions of these events, and a logical sequential unfolding of them (**Table5**) These observations are consistent with:
- A vast ebbing and flowing flood burying large numbers of animals and plants across one massive land mass.
 - Then subsequent mid-late spreading occurred across all the earth, already broken or was breaking apart into continents containing mankind and animals which had the breath of life.⁸⁴⁹

These observations are consistent with a unique worldwide flood event such as described in the Noah flood account.

⁸⁴⁹ It is probable that animals would have then spread across the earth after the Flood much more rapidly than mankind, but that is outside the scope of this writing.

GENERAL CONCLUSIONS FOR THE DISCUSSION

The criteria for Determinancy are fully met in the Noah flood account. Specific words that identified real objects were used to discuss the event. These words, in many cases, were shown to be derived from ancient language sources—revealing the antiquity of the text. As well, the moral context of the account was in sharp contrast to other ancient accounts of the Flood- revealing the uniqueness of the text.

The text was shown to be a complex, integrated, but unified story. Its structure revealed a crescendo/decrecendo pattern and a continuous flow through time. It thus met the criteria for Connectedness.

Finally, there are geological, biological, and anthropological observations that support the concept of a massive watery flood, unique in extent (in that it covered the entire continental crust of the earth), that occurred at some time in the recent past (thousands of years ago and not millions). Subsequent repopulation of the earth resulted from small groups of life forms, including the human race. This is consistent with the Noah Flood story. Thus the criteria for Generalizability are met.

When the information of the word descriptions (Determinancy), the constructs of the reasonable sequential timing of the event (Connectedness), and the properties of the earth and the residual evidence for a world-wide flood are combined there occurs a significant overlap and compatibility of the information (**Figure 39, Table 5**).

The Noah Flood Story meets the criteria for a True Narrative Representation, and can be reliably read as an accurate eye witness account consistent with a world-wide flood. This has significant ethical/moral implications for mankind in this present age.

See Volume 2 Tables and Figures

Discussion

A FINAL CONCLUSION

The entire story is consistent with a true narrative account. It precisely described the ark's structure: length—300 cubits, breath—50 cubits, and height—30 cubits. These are sea worthy dimensions. It was made of gopher wood and sealed with pitch-materials available to Noah. It had 3 levels of rooms, a window which may have been positioned in a structure above the body of the ark, some sort of covering (which could be removed from on board the ark), and a door. It has been shown that the number of animals taken onto the ark along with Noah and his family was feasible. As well, they took nutritional supplies.

The description of the breakup of the earth and the down pouring of water has been linguistically structured as a unified and literal event. The mountains before the flood were not as they are found today. Conditions consistent with crustal plate tectonic activity was not described in the Bible until the onset and during Flood. All mountain formations present today reveal that their formations were most likely to be the result of volcanic eruptions or plate collisions. However, they were not raised until after having water laden sediments deposited on them. Thus the “hills” and “mountains” of the pre-flood earth were most likely low lying rolling convex structures lying over one uniform land mass. (The language can be consistent with this.) The breakup of the “fountains of the great deep” and the “windows of heaven” being opened changed all this. These observations are consistent with the Noah Flood account.

That Noah did personally record the events of the flood is strongly supported by the way time was counted in the account. It appears that he counted months by the lunar moon cycles- the first of the month being the new moon. (Interestingly it probably means that he could see the sky at some of the time.) This would have given a year of 354 days/year. But a solar year is 365 days/year. Thus, he entered the ark on the second month 17th day, but he left the ark on the second month 27th day of the next year, or 10-11 days after he entered it (one year later)—which would be a the solar year. This form of counting the

months and years goes back to the beginnings of antiquity and supports the antiquity and eye witness experience of the account.

POST-SCRIPT

One might ask why don't more people support and believe in the literal Noah's Flood when there is so much evidence that supports it? The answers are varied due to the variety of people, but the ultimate answer can be found in the Bible.

Luke 17:20-30 says:

“And when he was asked by the Pharisees: when the Kingdom of God should come? He, answering them, said: The Kingdom of God cometh not with observation. Neither shall they say: Behold here, or behold there; for, lo the Kingdom of God is within you. And he said to his disciples: The days will come when you shall desire to see one day of the Son of man, and you shall not see it. And they will say to you: Lo here, and lo there. Go ye not after, nor follow them: For as the lightening that lighteneth from under heaven, shineth unto the parts that are under heaven, so shall the Son of man be in his day. But first he must suffer many things, and be rejected by this generation. **And as it was in the days of Noe, so shall it be also in the days of the Son of man. They did eat and drink, they married wives, and were given in marriage, until the day that Noe entered into the ark: and the flood came, and destroyed them all.** Likewise, as it was in the days of Lot: They did eat and drink, they bought and sold, they planted and built. And in the day that Lot went out of Sodom, it rained fire and brimstone from heaven, and destroyed them all. Even thus shall it be in the day when the Son of man shall be revealed.”^{850,851}

It is clear that many people will not be concerned about the things of God in the last days. They will be lovers of pleasure rather than the things of God.

⁸⁵⁰ G.L. Haydock and F.C. Husenbeth, eds., *Douay Rheims New Testament with Commentaries by the Saints* (Monrovia, CA: Catholic Treasures, 1883, modern reprint).

⁸⁵¹ In the first instance the judgment appeared global and in the second local. But both judgments were physical and were sent against man for his willful sinful activities. It destroyed “all” who were judged.

2nd Peter 2:1-12 says:

“But there were also false prophets among the people [among the Jewish people], even as there shall be lying teachers among you, who shall bring in sects of perdition, and deny the Lord who bought them, bringing upon themselves swift destruction. And many shall follow their luxuries, by whom the way of truth shall be blasphemed: And through covetousness with feigned words they shall make merchandise of you: whose judgment now of a long time ceaseth not, and their destruction slumbereth not. For if God spared not the angels that sinned, by having cast them down into the place of torments, delivered them into the chains of hell to be tormented, to be reserved unto judgment. **And spared not the original world, but preserved Noe, the eighth person, a preacher of justice, bringing in the deluge upon the world of the impious.** And reducing the cities of the Sodomites, and of the Gomorrhites into ashes, condemned them to destruction; making them an example to those that should after act wickedly: And delivered Lot, a just man, oppressed by the injustice and lewd conversation of the wicked: For in sight and hearing he was just: dwelling among them, who from day to day vexed the just soul with their impious deeds. The Lord knoweth how to deliver the godly out of temptation, but to reserve the unjust unto the day of judgment to be tormented: and especially those who walk after the flesh in the lust of uncleanness, and despise governments, audacious, pleasing themselves, they fear not to bring in sects, blaspheming: Whereas angels, though they are greater in strength and power, bear not an execrable judgment against themselves. But these men, as irrational beasts, naturally tending to the snare, and to destruction, blaspheming those things which they know not, shall perish in their corruption.”⁸⁵²

When one looks out on the Grand Canyon what does one see? A deep gouge in the earth done by rapid flowing waters during which the sediments being eroded were still relatively soft, deposited from a recent massive flood, and which since that time have subsequently fully hardened? If so then the logical follow up question to ask would be—why and what caused such a large flood? Given the revealed narrative of Noah, the power

⁸⁵² Douay Rheims Bible 2 Peter 2:1-12.

of God as manifested in the residue of the Flood, each person upon reflection would be confronted with the need to repent and return to God. However, as seen in the book 2 Peter and the book of Luke there are many people who do not want to acknowledge God, but rather pursue the pleasures of their own ways. To them it becomes more palatable to view the Grand Canyon strata as something that gradually developed from the seas over eons of time and were then eroded by a meandering stream. As such it no longer becomes a testimony of God's judgment against sin.

To this 2nd Peter 3:3-7 is relevant: ⁸⁵³

“Knowing this first, that in the last days there shall come scoffers with deceit, walking according to their own lusts, saying: Where is his promise, or his coming: For, since the fathers slept, all things continue so from the beginning of the creation. **For this they are willfully ignorant of, that the heavens were before, and the earth, out of water and through water, consisting by the word of God: Whereby the world that then was, being overflowed with water, perished.** ⁸⁵⁴ But the heavens which now are, and the earth, by the same word are kept in store, reserved unto fire against the day of judgment, and perdition of wicked men.”

Another relevant scripture is found in Romans 1:16-22(KJV):

“For I am not ashamed of the gospel. For it is the power of God unto salvation, to every one that believeth, to the Jew first, and to the Greek. For the justice of God is revealed therein from faith to faith: as it is written: The just man liveth by faith. For the wrath is revealed from heaven, against all impiety and injustice of those men that detain the truth of God in injustice. Because that which is known of God is manifest in them. For God hath manifested it to them. For the invisible things of him, from the creation of the world, are clearly seen, being understood by the things that are made: is eternal power also and divinity: so that they are inexcusable. Because that, when they had known God, they have

⁸⁵³ Douay Rheims Bible.

⁸⁵⁴ This phraseology clearly indicates a worldwide flood.

not glorified him as God, nor given thanks: but became vain in their thoughts, and their foolish heart was darkened: For professing themselves to be wise, they became fools.” In these last days the knowledge of Noah’s Flood should cause certain things to happen in the hearts of those wanting to know God:

- 1) For those who have not yet given their hearts to God it is a sign to repent and turn towards God. For God speaks to the hearts of all men (John 16:8-11).
- 2) For the Jew it is a sign of His faithfulness to the Covenant. As well, the Bible says that in the last days “...I will pour upon the house of David , and upon the inhabitants of Jerusalem, the spirit of grace and of supplications: and they shall look upon me whom they have pierced, and they shall mourn for him, as one mourneth for his only son...”(Zech. 12:10).
- 3) For the Christians who are unsure of God’s intimate involvement in their lives, it should remind and encourage them that He is in control and He does judge sin and does save those who call upon His name (Joel 2:32).
- 4) For those Christians who are more settled in their faith it is a reminder of the great call to go out into the world and make disciples of all men (Matthew 28:19).

To God Be The Glory

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