

The Genesis "Fountains of the Great Deep" in Christian Theology and Geology: History and Theology

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Abstract

The Christian church is increasingly ambivalent about the recent, unique, catastrophic global Flood described in Genesis. Until the eighteenth-century challenge from 'Enlightenment' philosophy, there was a majority view that it was a carefully described real event. Since then, an influential portion of contemporary evangelical scholars insist, pressured by mainstream geology, that there is no evidence for that Flood. Using ancient Near Eastern comparative literature, they reinterpret the biblical text as less historical than theological and literary, or at least more limited geographically. The thesis of this two-part paper is that the Genesis "fountains of the great deep" are a key detail in a record whose ancient context highlights its historical trustworthiness, carrying powerful theological and geological implications that cannot be ignored. The catastrophic Flood was real and global, leaving abundant evidence in the rocks and fossils. As such, 'deep time' interpretations do not do justice to the biblical text and its theology, nor to the geology. This paper explains our theological reasoning.

Keywords: Ancient Near Eastern literature, Criteria for Historicity, Doctrine of Scripture, Enlightenment, Evangelicals, Foolishness, Fountains of the Great Deep, Geology, History of Interpretation, Hyperbole, Local Flood Theory, Philosophy, Theology of History, Uniformitarianism.

Introduction

There are many Christians who do not want the story of a unique, recent, catastrophic global Flood and its aftermath in the days of Noah (Genesis chapters 6–11) to be true. Its account of wholesale judgement and destruction of humans and animals is not part of the "good news" they want to proclaim (discussed by Moberly 2009, 102–103, 106–110). Furthermore, its clash with mainstream geology would make them sound naïve and credulous to educated sceptics who will also ask if they believe that people used to live for hundreds of years and a serpent talked. The first 11 chapters of Genesis are then best left in the misty world of 'proto-history' which supposedly teaches spiritual truths about God and the world but cannot be relied upon for factual details. So they choose to ignore the Flood entirely, and avoid rational debate. Minds are closed.

Other Christians note the numerous flood-legends worldwide, especially those from Israel's eastern neighbours in the wide Mesopotamian river-valley. With physical copies of their flood myths dated long before the biblical texts, their 'plausible' view is that a severe local flood really happened in ancient times and was retold over centuries and across different cultures until it became a cosmic cataclysm in the understanding of the Israelites, justifying use of hyperbole. But for them, only the one God was responsible, so Genesis was written partly as a polemic against the polytheism of neighbouring civilisations. Since everyone knew the flood myth was not strictly history (so they argue), modern readers with a Western empirical worldview asking historical questions of Genesis 6–9 become guilty of misreading the ancient author's shared understanding with his original audience. The details of the (local) flood event are unimportant, only its cosmic theological meaning matters.

Both these groups of Christians hold the same foundational, self-confessed reason for rejecting the unanimous testimony of church history up to the eighteenth century that the biblical Flood was a recent global event. It is the supposed unanimity of mainstream geology that there is zero evidence for such a global Flood. 'Science' trumps the Bible, insofar as when they seem contradictory, the biblical rather than the underlying scientific data must be reinterpreted, to bring them into agreement. Yet these Christian scholars are either ignorant or unconcerned about the philosophical underpinnings of the modern discipline of geology (Colossians 2:8 would thus apply). Charles Lyell's foundational work revived earlier Deistic ideas of James Hutton in an "attempt to explain [geology] by [processes] now in operation" (Lyell 1831, title). He explicitly aimed to "free science from Moses," as he wrote to a friend, dismissing "what history has recorded" in the ancient biblical account, by cunningly appealing to the "liberality and candour of the present age" of Enlightenment to win over "the bishops and enlightened saints" (Lyell 1830, 268, 271). His persuasive lawyer-like rhetoric

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provoked few significant challenges from theologians and scientists, so his "attempt" became formalised as "uniformitarianism" and the sound-bite "the present is the key to the past." As a result, modern geology will no longer even consider the possibility of catastrophic processes on a global scale as Genesis requires. Even when uniformitarian geology struggles to find answers to its key questions and evidence is found to support a biblical interpretation, that interpretation is to be excluded and denied publication, on principle.

This development is entirely unsurprising. On the one hand, a close, literarily informed (genre-sensitive) reading of the biblical text and its chronological details demands a recent global Flood, if one can call 4,300 years ago recent. This requires that the huge quantities of sedimentary rocks and fossils be interpreted as abundant evidence for that Flood. On the other hand, the uniformitarian presuppositions of mainstream science require the opposite interpretation of the same evidence-that these were deposited gradually at current rates over millions of years. That alone can provide the necessary length of time and sequence of ancient organisms upon which macro-evolutionary theory depends. If the Flood is historical, secular evolutionary earth-history is not; the same geological evidence has two mutually exclusive paradigms of interpretation. Christians must decide which they will build their worldview upon, because Genesis and science are evidently about the same physical-spiritual reality (see further, van der Meer 2022, 248-260; Mathews 1996, 107-109, 111; 2022, 539-540, 542-543; Moreland et al. 2017, 633). Biblical evidence for a younger earth is thus found primarily in Genesis 6–9 (Numbers 2006, 8), rather than in Genesis 1 (Young and Stearley 2008, 169–210).

Since secular earth-history powerfully shapes society's view of the physical world through schooling, media, and scientific pronouncements, our aim in these papers is to re-commend the superior explanatory power of the biblical story (as per Romans 12:2). In this paper we show that the Bible's account is best understood in its ancient Near Eastern context as a trustworthy and detailed historical record of a well-known global event, with inevitable geological as well as theological implications. Part 2 confirms its historical reality by examining six distinct features of the Flood from the biblical record. The "fountains of the great deep" are the main key, providing a superior way of explaining observable geology, especially sedimentation, than any form of uniformitarianism. Lyell and his followers wanted science to be freed from Moses, but neither the geo-historical evidence nor the biblical account can be erased. When both are respected, scientific observation should eventually confirm true history.

In this paper we show that the Bible's account on theological history examines the variety of recent approaches to the Genesis account by Christian scholars (classified into three Groups as per table 1 below), informed by James E. Patrick's doctorallevel scholarship in Old Testament studies (Patrick 2016) and the broad reading of all three authors. The geological details confirm its historial reality inspired by earlier creationist journal articles, and books such as Whitcomb and Morris (1961) and Snelling (2009). Although Boyd and Snelling (2014, 8-11) ask seven geological questions pertaining to Genesis 7–8, the six features we identify in the biblical description of the Flood are different and are subsequently used as a framework for a systematic checklist approach to the geology. Furthermore, while some creationist papers draw on data obtained from the oil industry, this source of data (and to a lesser extent some urban geology) will be the dominant one used therein, based on John D. Matthews' 23 years in the upstream oil industry followed by 10 years in a petroleum and earth-science academic setting (Matthews 2004). Reading the Genesis phrase "fountains of the great deep" from that perspective accounts for the source and behaviour of the Floodwaters, without any need for the outdated water canopy theory still attacked by some critics of creation science (for example, Seely 2004, 305-308; Lamoureux 2009, 133-135, 224). It can also shed new light on the geological evidence, superior to anything offered by uniformitarianism or its modern forms such as actualism or neocatastrophism.

Diverging Christian Searches for Flood Evidence—1760–1960

In this paper on theological history of the biblical evidence, it is appropriate to cite the careful study of prior interpretations from one of our respected opponents in Group 2, Davis A. Young (1995). Young openly admits that at every stage of biblical and church history up until the Enlightenment in Europe, Christians were practically unanimous in the (Group 1) belief that Genesis 6–9 described a historical global Flood and accepted this record of earth history. Even "during the late seventeenth and early eighteenth centuries...the flood was at the center of mainstream theoretical earth science in Europe" (Young 1995, 66; cf. 77).

With the exception of occasional ideas about Genesis 1 that departed from the rigidly literal interpretation, the almost universal view of the Christian world from its beginnings through the seventeenth century was that the Earth is only a few thousand years old....Not until the development of modern scientific investigation of the Earth itself would this view be seriously called into question within the church. Following the lead of Hooke, Steno and Scilla, a growing number of natural philosophers during the late seventeenth and early eighteenth centuries accepted the organic origin of fossils, and some of them believed that they had found a suitable explanation to account for their position in stratified rocks high in mountainous terrains. The Noachian Deluge emerged for a time as the most widely held explanation. If one accepted the Bible as the authoritative Word of God, then it was sensible to assume that this Flood of apparently spectacular proportions was responsible for all the dead plants and animals entombed in the rocks. This general point of view can be traced back to the church fathers. (Young and Stearley 2008, 46, 62)

One of the last prominent mainstream treatments of the Flood as "the principle causative agent for the world's geological strata" was Alexander Catcott's 1761 book *A Treatise on the Deluge* (Young 1995, 77).

Through the 1820s-1840s as the professional discipline of geology became established, a minority view of "scriptural geologists" continued to affirm the perspicuity of the biblical record, against alternative theories such as neptunism (gradual diminishing of an ancient ocean) or diluvial catastrophism (repeated Flood-type events over long ages) by those who downplayed the Bible's importance. Buckland (1822) and de la Beche (1839) were old-earth creationist geologists who still reserved a role for a recent global Flood affecting the youngest sedimentary layers. However, Charles Lyell's three-volume Principles of Geology (1831–1833) brought about the triumph of radical uniformitarianism over both scriptural geology and diluvial catastrophism of the Buckland variety (see further Mortenson 2004, 30-33; 2008a; Bonney 2019; Rudwick 1985).

Nevertheless, Lyell's avoidance of a frontal assault on the historical truth of Genesis 1-11, after many decades of a gradual downgrading of the biblical Flood into something compatible with secular accounts of earth history, concealed from many in the church the determination of secular humanism to "cast away the cords" of biblical history altogether (Mortenson 2008a, 90-91). Scientific rationalism insists on complete freedom to analyze the world without reference to the Creator God and His interventions in recorded history. In contrast to geology, the direct attack on the Bible's authority by German higher criticism in this era was resisted for a little longer by Victorian evangelicals, even though its 'scientific' theological analysis assumed the same secular principles as did geology. This critical approach to the Bible rejected Moses' authorship of its first five books and treated especially the early books of the Bible as more concerned with theological ideas than real history (Legaspi 2010). In English-speaking biblical scholarship, it rapidly became dominant in

the second half of the nineteenth century, teaching skepticism to those training for Christian ministry. thus severely weakening the church's confidence in the truthfulness of God's Word. Most orthodox Christian theologians and scientists who initially resisted higher critical doubts (and Darwin's theory of evolution) had long been harmonizing Genesis with the new scientific consensus about a vast age for the earth, by surrendering traditional exegesis of Genesis 1 for either the gap theory after its first verse, or the day-age theory, or both (Young and Stearley 2008, 120-131; Roberts 1998). Notable examples include conservative Hebrew professors E. B. Pusey (footnotes in Buckland 1836, 21-27) and Alexander McCaul (1861, 190-219, 233-234). Those rare evangelicals who held firm to the historic teaching of the church regarding the Flood and early biblical history, did so in the absence of external corroboration (for example, Turner 1846, 14-16, 67-74 [quoting Jahn], 216-220; W.T. Hamilton 1852, 202–252; also those mentioned by Young and Stearley 2008, 118–119, 144–145, 147; Roberts 1998, 229, 253).

However, the discovery and decipherment of cuneiform literature from ancient Mesopotamia by early archaeologists in the late-nineteenth century electrified the Christian public, and frequently challenged the scholars' skeptical literary analysis. Accounts of the Flood—first within the Epic of Gilgamesh reported in 1872, and then in the Atrahasis Epic between 1875 and 1900, etc. (Young 1995, 169–171, 212)—proved that Israel's belief in a worldwide Flood was shared by the most ancient literate civilizations. Scholars asserted that the Bible depended on the earlier accounts, stripping those pagan versions of their original polytheism and other pagan elements (Currid 2013, 16–18).

Various archaeologists from 1929 onwards tried inconclusively to identify correlateable layers of sediment in excavated Mesopotamian cities as evidence for the original large, but localized flood which gave rise to the flood traditions (Young, 216-225; Bailey 1989, 28-38; Morey 1991, 2-3, 11-14). Certain influential evangelicals such as Bernard Ramm (1954) accepted the archaeologists' presuppositions, that the author of Genesis had deliberately aggrandized a limited flood into a global catastrophe. His view was that Christians should not hold to a hyperfundamentalist view of Scripture but should move closer to the 'assured results' of science. His convictions are generally shared by those in what we shall call Group 2 who still affirm evangelical doctrine, such as the respected leader John Stott (n.d.), although in practice their distinction from liberal Group 3 scholarship on this specific question becomes increasingly difficult to maintain, as with the example of Provan (2015) discussed below.

However, to defend a truly global rather than local flood scientifically, evidence must be sought in geology rather than archaeology-deep in the rock layers rather than the shallower "archaeological" layers above them (Sailhamer 1990, 4; overlooked by Atkinson 2021, 107–108). The first to resurrect Flood geology was the Seventh-Day Adventist, George McCready Price (1926), followed by the Lutheran, Byron Nelson (1931), and others (see Numbers 2006, chapters 5-9; and D. Whitcomb 2021). Their writings showed that uniformitarian geology was facing increasing challenges over its methods and assumptions, thus lacking the authority to disprove a recent global Flood. Eventually, The Genesis Flood by Whitcomb and Morris (1961) catapulted Flood geology back into the mainstream of evangelical thought, directly challenging Ramm's inadequate treatment of both the biblical text and the geology. Their book inspired the establishment of a number Creation-oriented research and promotion of organizations such as Creation Research Society and Institute for Creation Research (see further Numbers 2006, chapters 11, 14). Consequently, Group 1 scholars have multiplied ever since.

Three Views on the Biblical Flood—1960-2020s

Since not all were convinced by Whitcomb and Morris, there remains a wide spectrum of beliefs about the Flood amongst Christians. But within labels often given to Christians such as charismatic, conservative, episcopal, evangelical, fundamentalist, high-church, low-church, Pentecostal, etc., there is no consistent pattern to their beliefs about the Flood except perhaps among Seventh-Day Adventists. Therefore, we will divide them into three major groups, though the boundaries between them are always somewhat imprecise and some scholars have changed their views, in different directions (see, for example, Berry 2014; Cox 2021). Group 1 have a clear testimony-the Flood story is a record of a historical global event, interpreting Genesis at face value through a close literary (genre-sensitive) reading of the text, which also accords with the historic teaching of the church. Group 2 comprise mainly evangelical Christians who accept the Flood story as a record of a real historical event, but a local one from Near Eastern origins which is being recast in hyperbolic and polemic language to communicate truths about the God of Israel in opposition to polytheistic religious accounts. Finally, Group 3 are those who have no problem with the Flood story being mythological, whether or not it was inspired by an ancient local flood in Mesopotamia; they acknowledge that the author/s of the biblical story probably believed the Flood to have been historical and global but feel under no obligation to agree with the author. Evangelicals are

under more constraints in this regard, due to their doctrine of Scripture, so they are typically found in Groups 1 and 2. Although some (Lamoureux 2009; Enns 2012; Sparks 2012) self-identify as evangelical, their skepticism about Adam's sin inherited by all, and about the plain sense of Scripture in Genesis 1–11, do not sit easily with two of evangelicalism's four acknowledged pillars (Bebbington 1989, 2–17), respectively the universal need for conversion and the truthful verbal inspiration of the whole Bible.

Those from Groups 2 and 3 usually, implicitly or explicitly, depend on conventional scientific views to decide how to interpret Genesis, and can be deeply antagonistic to those in Group 1. They have even formed confessionally Christian educational organizations that vigorously assert the essential compatibility of the biblical and modern scientific worldviews, certainly well intentioned, but typically using intemperate language about traditional Christian perspectives (Pharoah, Hale, and Rowe 2009) even in personal interactions (Cox 2021). Some of them said yes to our 2008 offers of debate about the biblical and scientific interpretations, but after 15 years, we have stopped holding our breath for them to respond with specifics. Certainly within the UK education system, there is no room even to discuss creationism. Prominent heads of the Royal Society roll if they suggest that debate and discussion should take place (Baker 2009). The Enlightenment is too precious to be reformed, says one of our late Government Chief Scientists (Kroto 2008).

It is not easy to follow the subsequent story of the last 60 years in a strict chronological sequence or even treat each of our three groups separately. So table 1 shows some of the key theological and geological players in our three broad groups, some drawn from our own British context (though with international recognition) and grouped into successive decades. This makes it easier to see who should have been aware of earlier studies holding different views to their own instead of ignoring matters already in print. This has happened too often (see, for example, Matthews 2015). Some will dismiss books on geology by those without formal qualifications (for example, of Price by Kulp, noted in Whitcomb and Morris 1961, 184), even if they do not use this ad hominem argument against Darwin's lack of biological training, not to mention the fathers of historical geology themselves—lawyer Charles Lyell, surveyor William Smith, agriculturalist James Hutton, mathematician John Playfair, and comparative anatomist Georges Cuvier (Numbers 2006, 233; citing Morris and Whitcomb 1964). Nevertheless, most of our own entries have been restricted to those with formal qualifications in theology and/or geology.

Decade	pre-1950	1950s	1960s	1970s – 1980s	1990s	2000s	2010s – present
Group 1— Historical global Flood	Price 1926; Nelson 1931; Leupold 1942	Lloyd-Jones 1950 (1983)	Whitcomb and Morris 1961	J. Wenham 1980	Grudem 1994*; Mathews 1996*	Froede 2007; Snelling 2009	Sarfati 2015; Lisle 2015; Kline 2016*; DeRouchie 2017; Steinmann 2019; Mathews 2022**
Group 2— Historical local flood		Ramm 1954	Thompson 1962; Kidner 1967	Stott n.d.; Thompson 1982; G. Wenham 1987	Young 1995	D.R. Alexander and White 2004; Arnold 2009	Ross 2014 (contra: Stallings 2020); Longman and Walton 2018; Collins 2018; Grudem 2020; T. D. Alexander 2023
Group 3— Historical facts irrelevant			Nineham 1969	Barr 1977; 1984		Seely 2004; Lamoureux 2009	Goldingay 2010; 2020; Enns 2012; Sparks 2015; Provan 2015; Day 2023

Table 1. Key dates and scholars who have made relevant comments on the Genesis Flood.

With such a robust apologetic from Whitcomb and Morris, though now somewhat dated, it is surprising that many evangelicals still ignore it. A wealth of new material can be found in accessible book-form updates, most notably by Snelling (2009), and with a more limited focus by Bowden (1998), Froede (2007), Oard (2008), Garner (2009) and Sarfati (2015). Our aim now is to assess why Groups 2 and 3 have largely ignored the contributions of Group 1, and to reaffirm the recent global Flood as an indispensable part of Judeo-Christian belief. For this first part of our study, we track through our table focusing on the theology arguments.

Recent Christian Priorities in Flood Interpretation

This section will survey a number of teachers, influential in conservative circles, almost all of whom claim to have a high view of Scripture and its authority, if not its inerrancy. Their statements about the Flood will be synthesised to illustrate typical lines of reasoning, critiquing arguments even when made by admired scholars. If Longman and Walton (2018) are cited more often than others, it is only a mark of their recent, thorough, innovative contribution and their influence among evangelicals (for example, Griffin 2020, 139–140, 163–164). By contrast, some commentators on Genesis 1–11 understandably steer clear of the fraught questions of compatibility with modern science (for example, V.P. Hamilton 1990; Sailhamer 1990; Waltke and Fredricks 2001 [though n.34 on pages 132–133 does favor a universal Flood]), and thus do not feature in this survey. Yet it is possible to be non-committal while presenting opposing views fairly (for example, McKeown 2008, 294–317).

Three general hermeneutical contexts for interpreting the Flood account will be addressed in turn: 1) the plain sense of Genesis and its biblical echoes, 2) the ancient Near Eastern parallels, and 3) modern scientific geology.

(1) The plain sense of the text in the history of interpretation.

We return again to the fact that the practically unanimous teaching of Jewish and Christian interpreters of Genesis, up until the Enlightenment and even into the early nineteenth century (Mortenson 2004, 43–47), held to a historical global Flood. Even in recent scholarship, respected Group 3 theologians such as James Barr (1977, 42; similarly Day 2023, quoted below) readily confirm that "the only natural exegesis [of Genesis] is the literal one, in the sense that this is what the author meant...[and we know] he was deeply interested in chronology and calendar." Collins (2018, 23-24) and others question the value of literalism as a hermeneutical approach for Genesis 1–11. Yet the average reader would still concur with the secular critical scholar Wellhausen (2013 [1885], 298) at least on the point that its author (called 'P' in Genesis 1) intended more than

Jesus taught about the Flood and Jonah's 'whale' as historical (Matthew 24:37; 12:40), and Barr commented that He "may simply have taken it for granted that [these two] events took place just as described" (Barr 1984, 10-11). Dennis Nineham wrote similarly: "No such questions [about the historical reality of stories about Noah or Jonah] entered his head," because he had a mindset "in common with beliefs of the early Christians" (Nineham 1969, 21, 43). Sometimes Jesus' ignorance about the timing of His return is cited in support (Matthew 24:36) but staying silent about the unknown future and speaking inaccurately about the past are entirely different, for someone who speaks only what God has told Him to say (John 12:49-50; 18:37; see further Mortenson 2008b; Wieland 2012). John Wenham's careful review of Jesus' use of Old Testament narratives (1980, 6–9) decisively precludes the idea that He used them to convey spiritual truth apart from historical fact, and, "Curiously enough, the narratives that are the least acceptable to the 'modern mind' are the ones that He seemed most fond of choosing for illustrations" (p. 7). Both stories about Jonah and the Flood are stories about judgement, so treating them as hypothetical or anything other than "ordinary history," means Jesus' teaching about eschatology and judgement is groundless (pp. 8–9). Jesus and the apostles cited the Flood not as a figurative Sundayschool lesson (for example, Griffin 2020, 209-210), but as clear historical precedent for God's readiness to act suddenly on a worldwide scale when necessary. The evangelical leader Dr Martyn Lloyd-Jones (1947 sermon, published in 1983) made the same point about Jesus in his exposition of 2 Peter 3:1-7. "How can I believe that He is the Son of God and yet believe that He is so mistaken with regard to facts? My very belief in His Person insists on my accepting these facts of Old Testament history." His apostles assumed their historicity too. "If we do not accept the fact of the Flood, then Peter's argument collapses. His whole argument is based upon these facts."

Failing to recognize how the reality of future worldwide judgement depends on that of the Flood, Longman and Walton (2018, 99; reviewed by Halley 2018) argue that Jesus and New Testament authors "were sophisticated enough to understand" that the Flood story used hyperbole to convey cosmic theological impact, not literal global impact. Yet this argument runs the risk of downgrading the Second Coming to a similarly spiritual rather than literal world transformation (2 Peter 3:3-7). Still, they do not try to deny the fact proven by others, that biblical interpreters up until the Enlightenment all read it as a historical global Flood (Young 1995, 1-83). Rather, Longman and Walton (2018, 13) explain that "Throughout most of history, scholars have not had access to the information from the ancient world and therefore could not use it to inform their interpretation," as has been possible for trained scholars of the last 150 years. Reeves (2017), in his own critique of such views, wonders if this sort of denigration is a case of "chronological snobbery" (citing Lewis 1955, 207) as if accusing God of misleading His servants for thousands of years based on their simple grammatico-historical reading. If so, these scholars have been hoisted on their own petard by being "oblivious of modern influences on their own thinking" (Reeves 2017, 720).

Indeed, even Longman and Walton's (2018) interpretations of the ancient Near Eastern worldview supposedly shared by biblical authors can be flawed, as with their oft-cited Shamash (sun god) Tablet from the British Museum which shows the gods functioning above a pavement of waters in which are depicted some stars. Although they deduce that this represents the "waters above"-a "cosmic ocean suspended above a solid sky" (Longman and Walton 2018, 9)-others such as Hilber (2020, 64-65) have dismissed this analysis, because the inscription clearly identifies these waters as the apsu, underworld waters, where the stars travel when the sun is shining. Despite Walton's acknowledged specialism in ancient Near Eastern backgrounds of the Hebrew Bible, not all scholars agree that ancient worldviews were so simplistic (refuted as early as McCaul 1861, 220-230). Hilber himself (2020, 44-48) still maintains that the ancients thought the sky was solid, but he must argue against others, including world experts in ancient iconography, who reject the ubiquitous textbook image of the "ancient Near Eastern world picture" both for its lack of divine representations and because more credit should be given to empiricism in those times (Keel and Schroer 2015, 78-80, 83-84; Poythress 2015; Collins 2018, 243-264).

Longman and Walton (2018, viii, 13–14, 169–171) know that many will object to their reinterpretation of the Flood as contravening the clarity (perspicuity) and sufficiency of Scripture, *sola Scriptura*, as the Reformers taught. So, they quote the Westminster Confession of Faith (1.7) to argue that "those things which are necessary to be known, believed, and observed for salvation" are "clearly propounded" for us all. But rather than concluding that the unanimity of interpretation about the Flood shows it is necessary for all (for which see DeRouchie 2017, 37–38, 304; Kelly 2021, 254), they try to detach the Flood from "the big story of the Bible" and "the heart of the gospel," so as to leave it fair game for reinterpretation. But did not Paul's gospel in Athens teach that all "nations" are descended from "one" man, most naturally Noah not Adam (Acts 17:26; Genesis 10:32; V.P. Hamilton 1990, 346)? For Paul, the gospel story begins with Creation and post-Flood nations. The Chicago Statement on Biblical Inerrancy (1978), which Longman and Walton quote disingenuously (2018, 35—Article 13) to claim evangelical orthodoxy for their "hyperbole" explanation of the Flood narrative, affirms rather in Article 12:

We deny that Biblical infallibility and inerrancy are limited to spiritual, religious, or redemptive themes, exclusive of assertions in the fields of history and science. We further deny that scientific hypotheses about earth history may properly be used to overturn the teaching of Scripture on creation and the flood.

And even if it were true that only "salvation" details are clear, salvation is not just of individual humans from sin and death, but also of all creation from the effects of human sin, as Romans 8:19–23 clearly teaches. Redemption will thus reverse effects of the Flood throughout creation (Genesis 9:2–6), just as Isaiah 11 and 65 prophesy regarding animal predation. No doubt this is why Provan (2015, 120–124) goes to some effort to try to reinterpret this long-established doctrine too, despite the reaffirmation of only vegetarian diet in Genesis 6:21 (Blenkinsopp 2011, 139–140; see full rebuttal by Steinmann 2019, 96–97).

(2) Reading Genesis within its ancient Near Eastern context.

Even if we agree with scholars in Groups 2 and 3 that parallel Flood stories from the ancient Near East (ANE) are important for interpreting Genesis, their approach is flawed if they do not do justice to the extent of the clear differences between them. For example, respected ANE experts Longman and Walton admit Genesis is "dramatically different" and "a radical departure" (2018, 178), but DeRouchie (2017, 27) still rightly takes them to task for underplaying the Bible's tendency "to dispute and repudiate pagan myths," and commends Currid (2013) in support. Longman and Walton acknowledge differences of theological interpretation, relating to monotheism versus polytheism, the reasons for sacrifices, and the centrality of covenant in the biblical Flood (2018, 63-66, 81, 83, 104-106), but they often downplay or fail to appreciate other meaningful differences in the *descriptions* even if they mention them. For example, the Ark has a "standard shape of boats" as opposed to depicting "sacred space" (77; further, Sailhamer 1990, 83–84; Mathews 1996, 363–364; 2022, 329), the mechanisms of the Flood are "cosmic" rather than those "of any major storm" (Longman and Walton 2018, 79), and the length of the Flood is at least "one year" rather than one week (71). In fact, all these differences reinforce the sober intent of the biblical author to report a truly worldwide Flood.

Yet even the overt similarities between the biblical and ancient Near Eastern flood accounts only reinforce the Bible's greater realism and precision. This was most likely deliberate, since ANE flood accounts were also known in the land, evidenced by a locally-produced Late Bronze fragment of the Epic of Gilgamesh found at Megiddo (George 2020, 196, 204–205—not from Tablet XI; Goren et al. 2009). Both biblical and ANE cultures (for example, the Sumerian King List) believed the Flood to have been historical (Hoffmeier 2015, 46; Sparks 2015, 139; Collins 2018, 116–117; Longman and Walton 2018, 54; George 2020, 1-li; hence also the Greeks-Collins 2012, 407), but the Bible goes so far as to record five precise dates during the year-long Flood—Genesis 7:11; 8:4, 5, 13, 14-each specifying year, month and day. Completely avoiding these, Longman and Walton (2018, 71) refer only to the "forty" days and nights of rain, in order to declare all the numbers "formulaic" and therefore neither "specific [n]or precise designations of actual time spans"-baffling misrepresentation, as if these multiple non-symbolic dates meant nothing more than that the Flood was "massive." On the contrary, Mathews (1996, 376; 2022, 344) observes about these dates: "Unlike the Mesopotamian flood stories, the biblical account sets the event in a historical framework. For the author of Genesis the flood event is as real as the birth of Abraham." Wenham (2015b, 96) clarifies that ancient Near Eastern flood stories do have an "interest in causality and chronology," but "[t]hese features are even more prominent in Genesis."

Similarly concerning the greater specificity of the chrono-genealogies of Genesis 5 and 11 compared to the Mesopotamian king-lists, Longman and Walton (2018) group these chapters with undated family trees in Genesis 4 and 10 (2018, 107–109) as if they do not realize the unique significance of two ages per person in both chapters 5 and 11. This allows for more precise interlinking between generations than any comparable biblical or ancient Near Eastern genealogies, and hence more accurate dating of the Flood in relation to both Creation and Abram (Leupold 1942, 8, 233–239, 382, 395–396; Cassuto 1961, 252; 1964, 257; M.D. Johnson 1988, 31, 36, 77-82; Hess 1989, 248; Barr 1999; Sexton 2015; 2018a). Those who dispute this (for example, Green 1890 [about whom see Numbers 2007, chapter 6]; Whitcomb and Morris 1961, 474–489; Mathews 1996, 302–304, 305 nn. 30, 31; 2022, 259–261, 263 nn. 25, 26]; Steinmann 2017; 2018 [rebutted by Sexton 2018a, b]; 2019, 20–22; Collins 2018, 181–183; Goldingay 2020, 113, despite admitting the "face value" reading on 114, 116) typically argue from;

- (i) other biblical genealogies with gaps, though none record ages of fathering, and even genealogical gaps here would not entail chronological gaps;
- (ii) a lack of explicit summation of total timespan, though the similar lack for people's lifespans in Genesis 11:10–26 compared to 5:3–32 implies that readers are expected to do so;
- (iii) the age of "causing to be born" perhaps connected with a remote ancestor of the following named heir, though this breaks the linguistic link of causative verb to object, and ignores parallels with meaningful begetting ages later in Genesis, for example, Abraham or Isaac;
- (iv) the supposedly artificial arrangement of ten names with the seventh being key (cf. Ruth 4:18-22), though strictly chapter 11 has only nine names (or chapter 5 has eleven) and no significant seventh; or
- (v) the improbability of Noah's father being born before Adam died or of Shem outliving Abraham, hence the expanded numbers for chapter 11 in the Septuagint and Samaritan Pentateuch, though many overlapping generations would be inevitable if such lengthy lifespans are historical, as assumed by the ancient Jewish identification of 'Melchizedek' with Shem (Targum; b. Nedarim 32b).

Thus it is difficult to avoid the deliberate precision of these interlocking genealogies before and after the Flood, all the more so when compared to Mesopotamian parallels.

Even the Bible's comparatively more realistic ages for the long-lived patriarchs before and after the Flood can be seen as anti-Mesopotamian polemic, as Cassuto argued (Cassuto 1961, 264; 1964, 255; Wenham 1987, 134; also Mathews 1996, 304; 2022, 261–262])—the opposite of what one would expect from an author prone to hyperbole. Both cultures believed the Flood to have wiped out all humanity except those on the Ark, but as Longman and Walton say, "the biblical text is more explicit" (2018, 70), including precisely how far the waters exceeded the high mountains (69; Genesis 7:19–20). The Tower of Babel's top "reaching to heaven" is clear hyperbole (Genesis 11:4), but not so the precise dimensions of the Ark (Genesis 6:15-16). An ancient author whose supposed hyperbole steps from broad generalities to specifics such as these (also the "specific detail" of the mountains of Ararat instead of Mount Nimush-page 80) has surely crossed the line into wilful deception

of his audience. Hyperbole as a figure of speech relies on exaggeration and general descriptions (Longman and Walton 2018, 36–37), yet compared to its neighbours the Israelite account is distinctly more consistent, plausible, and precise in depicting a worldwide Flood. Longman and Walton's lack of methodology to identify and interpret "hyperbole," despite it being their innovative contribution to Flood interpretation (preceded by Ross 2014, chapter 16), is rightly critiqued by Burlet (2022, 9).

In fact, their valid comparative insight itself discredits Longman and Walton's theory that Israelites knew it was a local flood but added hyperbole to depict its theological impact as worldwide (2018, 36-41). Although ancient Near Eastern accounts depicted the Flood's mechanisms and duration and boat construction on a small scale, relatable for an audience living in flat flood-prone areas, no one seriously questions whether they thought the ancient flood was truly worldwide. Whether or not they saw the 'world' as a globe, it was all covered with water (Stallings 2020, 21–22). Only as late as Josephus is there even a hint of other survivors outside the ark (Ant. 1, 109 [1.4.1]; versus 1, 75-76 [1.3.2]; Ag. Ap. 1,130 [1.19]), when he harmonizes the biblical story with both a quote from Nicolaus of Damascus (Ant. 1, 94–95 [1.3.6]) and Plato's different version of the Greek flood story of Deucalion (Laws 678b; Collins 2012, 412, 417; 2018, 193-194, 234-235). So, if the much earlier Israelite author of Genesis was working with the Flood tradition common to his neighbours, conventionally worldwide in scale, how can Longman and Walton support their claim that he personally rejected this scale in favour of a historical local flood, given that he himself takes every possible opportunity to present the Flood as worldwide? Hyperbole presumes speaker and audience know that the facts are less extravagant (Longman and Walton 2018, 34). For example, the hyperbole in Joshua 10:40–42 and 11:16-17 they claim as a parallel is at least made clear for readers by contrast with 13:1-6 (Longman and Walton 2018, 30-34). But no hint of an actual local flood is given in Genesis.

On the contrary, Genesis adds a second source for the Floodwaters to account for their immense quantity. Near Eastern traditions refer only to a huge storm and intense rainfall, which the author of Genesis expresses as the "opening" of "windows of the sky" (Genesis 7:11; 8:2), using not mythical cosmic imagination but rather a conventional figure of speech for the rainfall's inexhaustibility (2 Kings 7:2; Malachi 3:10; Poythress 2015; Collins 2018, 252–256). But Genesis goes further, and precedes the rainfall with the "rupturing" of the "fountains of the great deep," the waters beneath and/or lower than the land (compare Psalm 104:5–9; Proverbs 8:23–29; Collins 2018, 248). The "deep" can refer to oceans (Genesis 1:2; Exodus 15:5, 8), but more likely here to subterranean reservoirs (Deuteronomy 8:7; Ezekiel 31:4, 15), since they must break open (Weinfeld 1978; Seely 2004, 307–308). This additional vast source of water, wide open for many weeks if not months, would supply what rainfall alone could not, and thus overwhelms any thought of a local flood.

Furthermore, the Bible then relies on this sober description of a worldwide Flood for its subsequent theological messages about

- a worldwide covenant with "all" animals descended specifically from those on the Ark (Genesis 9:10),
- (2) a worldwide human family descended from Noah's three sons (Genesis 10),
- and in later books,
- (3) a coming worldwide judgement "as in the days of Noah" (Luke 17:26–27; 2 Peter 3:1–7).

Mathews (2022, 413) affirms the historical value of Genesis 10, noting, "The author of Genesis goes to great lengths, even to the point of polemic, to distance its materials from the common ANE fare of legend or myth." Likewise, Currid (2013, 59) quotes Nahum Sarna to the effect that only Genesis makes it "a major theme" that all humanity is a single family, and true biblical theology always has a factual historical basis. In summary, drawing on Currid's "polemical theology" insights (61, 58; cf. Mathews 1996, 88–89; 2022, 516–517]), the highly praised textbook of DeRouchie (2017, 28) explains that the Bible "sets itself apart within its ancient environment" by "Establishing the authentic, original historical event that had been vulgarized and distorted through polytheism, magic, violence, and paganism" and "Showing that what was myth in the ancient world had real and factual substance in Israel's time and history."

It used to be common for Group 2 scholars to try to argue that the biblical text describes a local event, downsizing it by retranslating the Hebrew term 'eretz as "land" not "earth" (Genesis 6:5-7, 17; 7:4, 6, 10, 12, 17-24; etc.; for example, T.D. Alexander 2023, at 6:11–22). In support, they would argue (for example, Stott [undated]; Custance 1979, 18-19; Forster and Marsden 1999, 297-298; Ross 2014, chapter 16thoroughly refuted by Lisle 2015, chapter 14, and even by fellow old-earther Stallings 2020, 20-40) that the repeated use in the narrative of the term "all" for the Flood's extent and destruction could be relative to the author's perspective (as in Genesis 41:57; 1 Kings 4:34; or Luke 2:1) rather than absolute. However, both as a whole and in numerous details this reads against the grain of Genesis 6-9 (Davidson 1995; Mathews 1996, 365 [on Genesis 6:17]). The repopulation of the world with Noah's direct offspring after the Flood, in Genesis 10, "shows a vast area had been devastated" (Kline 2016, 35), the farthest reaches of the known world. And at an even larger scale, the Flood is clearly depicted as a wholesale decreation, returning everything to the initial watery state of Genesis 1, hence the new-creation mandate to the new Adam in 9:1–7 (Mathews 1996, 351, 383; 2022, 315-316, 353-354; Blenkinsopp 2011, 141, 145). In fact, the author could not have been more explicit that the Flood was global if he had wanted to; he has exhausted every technique at his disposal (Hasel 1975, 86, 89). The author's face-value belief in a historical worldwide Flood is taken as self-evident by secular theologians in Group 3, even though they are confident that the author was honestly mistaken (for example, Barr 1977, 42; Bowden 1998, 37; Day 2023, below). No doubt it is this pressure from fellow scholars that has forced most recent Group 2 scholars to reject the local flood interpretation of the text of Genesis itself, even if they still believe the original historical event was local. Compelling reasons are given by Longman and Walton that "Genesis Depicts the Flood as a Global Event" (2018, 42–50; likewise Seely 2004, 293-298), and Provan concurs (2015, 117): "It seems clear as we read this story taken by itself that a universal flood is in view."

One of the foremost critical scholars on Genesis 1–11 today, John Day (2023), holds the same view, writing in personal email communication to J.E. Patrick (24 June 2023, quoted with permission):

It's quite clear to me that the writers of the Genesis flood story were intending to describe a universal flood. That seems obvious to most people, not just to James Barr! Note the many references to 'all flesh', in keeping with which ha'aretz must mean the earth, not merely the land. If *ha'aretz* merely means 'the land', one is left asking what that land is and why the area in question is not specified. And if one were unnaturally to think that 'all flesh' merely meant all the flesh pertaining to a specific land, one would logically be forced to conclude that God's covenant in Genesis 9 was only with a specific land, not the whole earth. Surely all that is ridiculous. The plain meaning of the text is that we have here a depiction of a universal flood. Though of course, knowledge of the extent of the world was much less in biblical times than today. At the same time I see no evidence for a universal flood within historical time...

(3) Negotiating apparent conflict with modern geology

Group 2 scholars are left in a quandary, however, because unlike Group 3 who attribute "truth" to science alone, the doctrine confessed by Group 2 holds that the Bible is also "true" in all it affirms. So they seek support in the old Christian idea of "two books" of true divine revelation—creation and Scripture, general and special revelation-based on Romans 1:20. Yet they are forced to resist the further necessary principle of "asymmetry," which is taught in the transition in Psalm 19 from creation (v. 3-"There is no speech, nor are there words; their voice is not heard") to Scripture (vv. 7–14). This principle holds that settled Christian *interpretations* of Scripture trump scientific *interpretations* of creation, whenever they conflict (Frame 1983, 300; quoted disapprovingly by Young 1995, 307–309; but in support see Stallings 2020, 18–19). So, it is not surprising that Longman and Walton must turn to Roman Catholic doctrine to defend their conviction that "Science can purify religion from error and superstition" (2018, 167, quote from John Paul II; see further Benedict XVI 2007, 7–23). The Protestant doctrine of sola Scriptura was formulated against Catholic teaching, to clarify that Scripture has a superior rather than equal authority to human reason and church tradition. In the above reference, Frame rightly notes that without this asymmetry, there is no difference between walking by faith and walking by sight, between the word of God and the opinions of men. For further critique, see Reeves (2017).

Tellingly, Longman and Walton quote at length from Augustine (2018, 173–174; likewise Sparks 2015, 110; critiqued by Hoffmeier 2015, 140) to the effect that "ignorant" Christians whose declarations about Scripture appear "nonsense" to educated non-Christian scientists are "embarrassing", "bring untold trouble and sorrow on their wiser brethren", and imply that writers of Scripture were "unlearned men." The fact is, they were (Acts 4:13)! Indeed, Paul takes pains to urge any believer who "thinks that he is wise in this age" to "become foolish, so that he may become wise" (1 Corinthians 1:18-3:20; 3:18 [quotations from NASB unless otherwise stated]). Even Noah himself was derided by the whole world for his simplistic faith in God's word "about things not yet seen," and yet was ultimately vindicated (Hebrews 11:7).

Nevertheless, attempts by Group 2 to find a path of compromise between biblical and scientific interpretations fail to earn them greater respect among secular scientists, and leave them open to ridicule by secular biblical scholars too. An article on "Creation" in the evangelical *New Bible Dictionary* by Thompson (1962, 271) tried to "avoid these [literal] speculations" by saying the creation stories are not "concerned to provide a picture of chronological sequence but only to assert the fact that God made everything." Barr (1977, 41) thundered back against this reluctance to affirm the literal meaning: "How are the mighty fallen! and how ridiculous a mouse has the mountain of fundamentalist interpretation brought forth!" Yet Thompson left the statement

unchanged in the second edition (1982, 246), ignoring Barr's point about the author's evident chronological intentions, and reiterating that "these speculations and hypotheses are unnecessary."

Longman and Walton's repeated insistence that they do believe in a "real event" (2018, 15–20, 95–96, 145-149, etc.)-a literal (local) flood whose details are irretrievable from the interpretive hyperbole of the text-adds nothing of value either historically or theologically to their interpretation of Genesis, and thus stands out as a plaintive but unconvincing attempt to affirm their evangelical credentials. Thus, John Day comments (2019), "The authors" facing of certain [geological] facts and deviating from traditional evangelical orthodoxy is to be welcomed. However, in doing so, they stretch the concept of biblical infallibility beyond all recognition. It would make more sense simply to accept the Bible's fallibility." They may as well follow Provan's approach (2015, 117; compare Carr 2021b, 30-32), who finds two highly tenuous hints of post-Flood continuity with the pre-Flood world (Nephilim, Cainite trades) as proof that the author did not believe in his own story of a universal flood, in order to justify his denial that the text was ever meant to answer "questions of a scientific and historical kind." For this text at least, he boldly casts off his evangelical restraints to stand with Group 3 scholars who have no particular interest in history.

Collins (2018: especially 53) reaches essentially the same conclusion but by a different route, attempting to circumvent the whole question of biblical and scientific compatibility by appeal to the rhetorical purpose of ancient texts. Similarly to Longman and Walton, he pays lip-service to the history-related content of the narrative as "actual events" but identifies various supposed anachronisms to suggest a sort of popular folktale genre, so "the purpose of the stories is to lay the foundation for a worldview, without being taken in a literalistic fashion". Yet this worldview itself must include the belief that God acts in recorded chronological history, as is abundantly clear from Genesis onwards. Thus, Hoffmeier and Magary (2012, especially first four articles) defend the indispensability of historical truth as one of the distinguishing elements of the Christian worldview. (This volume does not address the Flood directly, but for this see Hoffmeier 2015.) It is precisely this unavoidably historiographical intent, evident in the Flood account's precise dates and measurements and locations, that resists the attempts of Group 2 scholars to avoid 'literalistic' readings of the intended genre of the Flood within its literary and cultural context.

Gordon Wenham's approach is more willing to acknowledge the limits of our knowledge, while giving due weight to the evidence of the text. For example, he explores various possible symbolic explanations for the long ages in Genesis 5 and 11, none convincing in his view, and is left with the historical challenges of reading them literally (Wenham 1987, 130-134; 2015a, 53-58). (On this question, Hill's oft-cited article also offers no meanings for any of her asserted sexagesimal calculations of the ages, and in fact acknowledges that sacred/symbolic numbers can also be literal, as with Sargon II's city wall circumference—Hill 2003, 241, 243.) As for the significance of dates during the Flood (Wenham 1987, 179–181; 2015a, 43–45), Wenham's tentative conclusion about a pervasive interest in the Sabbath (following the intertestamental Book of Jubilees) is surely disproven by the fact that three out of the five precise dates given would ostensibly correspond in his own schema to Wednesdays! More broadly, Wenham highlights the uniqueness and clear significance of precise timing of Flood events, even more "historical" than Mesopotamian flood accounts. He notes that "myths and folktales are not generally concerned with time at all. That is the prerogative of annals and historiographers" (Wenham 1987, 166, also 204; cf. 2015b, 87, 93).

Kidner's earlier commentary (1967)had attempted a similar balancing act, finding reasons to question the precise periods of time calculated by simply adding up the ages given in chapters 5 and 11 (pages 82-83), but still forced to admit that "the life-spans are intended literally" and the precise dating of the Flood stages "has the mark of a plain fact well remembered" (83, 90). He recognised the contradiction between the biblical "spiritual history" of humanity and the scientific account of palaeontology and acknowledged the influential answers to this problem suggested by Ramm (1954) and more "radically" by Whitcomb and Morris (1961), rejecting the latter because "it has not won support amongst professional geologists" (Kidner 1967, 27–28 fn.1; also 29). Kidner therefore proposed "a personal view" that redefines "man"/Adam (28-30) as a specially elevated neolithic farmer who had God's image breathed into him, a view for which John Stott then approvingly coined the phrase "homo divinus" (Stott 1972, 63; 1994, 162–166; developed by D.R. Alexander 2014, 287-304). Kidner also favoured Ramm's approach to the Flood as local, comprehensive only "from the narrator's own vantage-point," but then paradoxically reiterated that Christians must "be careful to read the account whole-heartedly in its own terms, which depict a total judgment on the ungodly world ... " (Kidner 1967, 93–95, emphasis original; likewise, 31). He advocated studying Scripture and science completely separately, despite admitting the Bible's apparently literal intent to record facts.

Evidently, the primary motivation of Group 2 theologians for rejecting the unanimous conclusion of church tradition that Genesis records a historical global Flood is neither 1) a close literary (genresensitive) reading of the text itself, nor 2) a careful comparison with parallel ancient Near Eastern accounts. Rather, they somehow feel obliged to take their cues from 3) mainstream geology, obediently repeating the mantra that there is "no [undisputed] geological evidence" for a global Flood (Stott [undated]; M.R. Johnson 1988., 20; Young 1995, 310-311; Longman and Walton 2018, 49; Moshier 2018,161; Griffin 2020, 9–20, 143, etc.). Longman and Walton (2018, 176) even "fully embrace" the charge "that science has caused us to go back to the biblical account of the flood to see if we are reading it correctly", believing scientific consensus to be a reliable guide to the "author's intention." Typically, such scholars reiterate their predecessors' practical questions about the Ark's construction, sufficient source and destination of the Floodwaters, migration feasibility and logistics of caring for so many animals, and more (Provan 2015, 117-118, citing Walton's Genesis commentary; Longman and Walton 2018, 38–41). But they do not engage fairly with the recent thorough answers offered for each question by successors of Whitcomb and Morris (1961) in Group 1, or even by earlier commentators such as Leupold (1942, 271-273, 277-278, 295-296, 301-304, 316, etc.). Historical questions are important, but if answers are ignored, one wonders if they are just rhetorical. We can understand the atheist Richard Dawkins refusing to debate with creationists just as did Kroto, but why are Young, Johnson, Moshier, etc. unwilling? McKeown does better by presenting fairly the views of creationist scholars, but his key objection to their explanation that "the mountains were raised up during the flood" is that "this is not explicitly stated in Genesis or anywhere else in the OT and must be seen as pure speculation" (McKeown 2008, 299-301, 58). In this, he seems unaware of this widespread and ancient reading of Psalm 104:6-9 with its direct verbal links to Genesis 7:11 and 19-20 (cf. 9:11), evidently alluding to God's reversal of the Flood as a relevant renewal of the third day of Creation (but compare Jones n.d.).

Derek Kidner had read Whitcomb and Morris when preparing his evangelical commentary on Genesis and acknowledged their arguments (for example, at Genesis 7:20), yet his clear advice was that until large numbers of geologists start to accept their thesis of a recent global flood, Christians could have "little reasonable doubt" that there was only a flood in the vicinity of Mesopotamia (Kidner 1967, 94). The tally of such geologists may have been zero at that point in time (Numbers 2006, 253, 258, 301–311), but that method of determining biblical truthfulness misses two significant points. First, regardless of the participation of trained Christian geologists, modern geology as a discipline is founded on philosophical naturalism, which denies the possibility that nature might show evidence of an interventionist God who judges human sin, and discounts historical testimony from the Bible on principle. To profess agreement with a recent global Flood, even on sound geological grounds, will disqualify professional geologists from further participation in academia (Frankowski 2008). A world system opposed to God can hardly allow its research questions to be shaped by His Word (1 John 5:19; 2 Corinthians 4:4). Second, standing firm on the Bible's historical testimony as trustworthy, in the face of nearly unanimous secular scepticism, has paid off on many occasions, corroborating the Roman governor Pontius Pilate, the Babylonian ruler Belshazzar named in the book of Daniel, the Hittite people between the time of the patriarchs and Solomon, and a worldwide historical Flood in the most ancient human records. No doubt future discoveries and correction of standard secular paradigms will continue to uphold the Bible's value. "Let God be found true, though every man be found a liar, as it is written..." (Romans 3:4).

Wayne Grudem and his hugely popular *Systematic Theology* textbook seems to fall into the same trap as Kidner. In its first edition (Grudem 1994, 306), he admits that:

The geological arguments put forth by advocates of this [global Flood] view are technical and difficult for the non-specialist to evaluate. Personally, though I think the flood of Genesis 6-9 was world-wide and that it did have a significant impact on the face of the earth and that all living people and animals outside the ark perished in the flood, I am not persuaded that all of the Earth's geological formations were caused by Noah's flood rather than by millions of years of sedimentation, volcanic eruptions, movement of glaciers, continental drift, and so forth, [because]... its advocates have persuaded almost no professional geologists, even those who are Bible-believing evangelical Christians... If the flood geologists are right, we would expect to see more progress in persuading some professional geologists that their case is a plausible one.

In the first part of this paragraph, he seems to be returning to Buckland and de la Beche's attempted compromise between secularist geology founded on anti-biblical philosophy, and a global Flood as the Bible plainly records. His dilemma is apparently not due to uncertainty about the intention of the biblical author, but rather due to the reaction of modern geologists. There are clear similarities with Kidner's views, even if he does still affirm (at least, in Grudem 1994) a global Flood.

In his later edition (Grudem 2020, 410) there is evidence of a change of mind, a sad but unsurprising development from his earlier equivocation. He says:

The geological arguments put forth by advocates of this view are technical and difficult for the nonspecialist to evaluate. But from what I do understand, I am not persuaded that all of the Earth's geological formations were caused by Noah's flood rather than by millions of years of sedimentation, volcanic eruptions, movement of glaciers, continental drift, and so forth.

Note the absence of the sentence beginning "Personally...I think the flood...was world-wide". It looks as if he has lost his initial faith in the biblical testimony about the Flood. In the rest of his discussion, he relies on the technical arguments of Young (which will be fully dealt with in a future paper along with some other Christian geologists), but by submitting biblical claims to the authority of the scientific establishment he has fallen into the same trap as Kidner, wisdom intimidated by unbelief.

Since modern geology is founded on the Enlightenment's rationalist philosophy, which rejects God's testimony revealed to fallen man in favour of what humans alone can reason from the material evidence visible to us, challenge is required. Biblical history and its theological fruit must not be poisoned by Enlightenment philosophy, concealed behind the "assured results" of scientific inquiry. When systematic theologians recognise the malign influence of the Enlightenment, as does Douglas Kelly (2008, 223-262, 353-357), they are then set free to derive valuable theological insights from the historical global Flood (2014, 55; 2021, 254) for topics as diverse as covenant (2008, 400-401, 407), Christology (2014, 320), and the Holy Spirit (2021, 31, 54), etc.

It is clear from the statements of these many admired Christian scholars discussed above, that how we interpret the evidence from geological observations can risk undermining our ability to interpret Scripture accurately, including its actual rhetorical effect within its ancient Near Eastern context, and can trump due respect for its traditional plain-sense reading. Especially for our Group 2 brethren, therefore, we commend the geological details in our subsequent proposed paper, and we are still open to debate.

Testing the Flood Account for Historical Reality

There can be conflicts between special revelation and what is commonly known from general revelation. Examples include miraculous events in history such as the birth of Isaac, the crossing of the Red Sea, the shadow reversing on the stairway for Hezekiah, and the resurrection of Jesus. In such cases, it is possible to interrogate the biblical record for other signs of sober historiographical intent, to reassure ourselves about the narrative's genre. As Stallings writes, "if a[n intentionally secularistic or even atheistic] researcher is willing to include the evidence of nature in their quest for truth, they should also be willing to include the evidence of Holy Scripture—even if only on natural grounds—because *each* is considered to be a form of testable *empirical* evidence" (2020, 17, emphasis original).

According to a classic article by Stein (1980), historical Jesus research has refined nearly a dozen "criteria for authenticity" to assess the historical accuracy of *specific* sayings or events in the life of Jesus. Other factors can support the substantive accuracy of the Gospel accounts in *general*, such as involvement by eyewitnesses, evidence for care in preserving traditions including difficult sayings, and absence of details that would have been of interest to later generations. Together these justify accepting the Gospels' general trustworthiness as historical records, presuming them to be innocent until proven guilty. But beyond that, the authenticity criteria allow for even closer analysis of specific traditions for historical probability. Craig (2008, 292-293) rightly notes that these are positive criteria, sufficient but not necessary conditions of historicity, so their absence does not necessarily prove inauthenticity. These criteria can only offer circumstantial support for historicity.

Applying them to the Hebrew Bible is not straightforward, since the period between the ostensible time of writing of biblical books (much disputed) and their earliest manuscript evidence is much greater than for New Testament books. However, the discovery of the Dead Sea Scrolls confirmed the remarkable accuracy of medieval Jewish manuscripts from a thousand years later, so we have good reason to trust the conservative copying tradition even further back (Matthew 5:18). There is also considerable scholarly disagreement over the unity of Hebrew Bible books, even those with manifestly coherent authorial style such as each of the major prophets (see Longman and Dillard 2006). The source critics have long seen the Flood narrative as a parade example of the splicing of two independent literary sources, but the actual evidence for literary unity and coherence is far stronger than is often recognised (Chisholm 2012; also Leupold 1942, 280-285; Wenham 1987, xxxix-xlii-for 'J' read 'Moses;' Keiser 2013; Berman 2017; pace Carr 2021a). Regardless of literary composition, though, the biblical texts have been relied upon by archaeologists ever since their discipline was established, as broadly dependable historical records that often correspond surprisingly closely to the material evidence and ancient writings being unearthed (Anderson and Edwards 2014). As for the current discrepancies between archaeology and Scripture prior to the neo-Assyrian empire in the ninth century BC, chronological misalignments are probably to blame (James et al. 1991; Mahoney 2014; Sexton 2015, 218 n. 142; Johnson, Austin, and Wiltshire 2018, 13–43). Moving back into 'pre-historical' eras, vastly expanded scientific dating whether of archaeological levels or of ice cores and rocks (for example, Seely 2004, 298–303) can only presume current rates of radioactive decay or deposition. By definition, these dates cannot be calibrated with reference to recorded historical data; that is, unless one takes seriously the claim of Genesis 1–11 to be historical.

Overall, given the abundant evidence of historical correlation so far (as noted above), as well as the Hebrew Bible's repeated emphasis on bearing truthful witness, even when recording serious moral failures for practically all of its heroes, there is good reason to trust the historical books in general, even apart from our doctrinal commitment to the Bible's inerrancy. The Flood story is obviously within one of the historical books, Genesis, regardless of the book's varying stylistic registers of prose narrative, as evidenced by its overall arrangement according to toledot, "family histories" (Hoffmeier 2015, 28-32). Even so, it has been common among Group 2 scholars to restrict this general trustworthiness of historical texts to Genesis 12 onwards, while reclassifying preceding chapters as "proto-historical" or "pre-historical" (Wenham 1987, 166, 204), or "archetypal history" (Packer 2001, 13, 15). Group 3 scholars prefer "mytho-historical," which is evidently the intended meaning behind Longman and Walton's less provocative term "theological history" (Longman and Walton 2018, 91-92, 17-20), and Goldingay's "historical parable" (Goldingay 2010, 27-29, 103-104; 2020, 4-5, 14; also Wenham 2015b, 87). But all these terms do acknowledge the clear evidence of the "historical" genre within these earliest chapters (Leupold 1942, 11-13, 25-27; Mathews 1996, 41, 121-122; 2022, 35, 70-71; Kelly 1997, 41-42.) It is therefore important to look more closely at the Flood account for evidence of its inherent historical probability, even before considering the geological testimony. For this we can adapt some of Stein's "criteria for authenticity" to fit an Old Testament setting.

(1) Does it have multiple attestation?

On the one hand, those Group 2 scholars more amenable to source-critical conclusions about two independent sources behind the Bible's Flood narrative might also be expected to recognise them as "two or three witnesses" in ancient Israel who shared a belief in the historical event of the Flood. But even for Group 1 scholars, multiple attestation comes from the Sumerian King List and several different literary accounts from Mesopotamia, all describing a comprehensive Flood in the distant past which they treated as "historical" to a greater or lesser extent (Wenham 1987, 166; cf. Hasel 1978).

Furthermore, the considerable number of flood legends from cultures all over the world (including Africa and northern Asia—Lang 1985; Lee 2010) cannot be denied even by those for whom this is an inconvenient truth that must be explained away (Longman and Walton 2018, 162-165). This is readily recognised as just what one would expect if the Flood were historical and global. In fact, the wide diversity of details in the stories is consistent with independent oral preservation of an ancient memory by peoples migrating outwards from Babel with mutually unintelligible languages, unable to borrow easily between cultures and landmasses. Furthermore, the value of the observation that most stories are found in places that often experience flooding, is called into question by its most obvious exception—Israel itself! Local floods such as around the River Jordan (Joshua 3:15) cannot compare to the "mabbul," which from Israel's geographical perspective must have covered even Mount Hermon and Lebanon (Psalm 29:5-6, 10), and the central hill-country (cf. Goldingay 2020, 146).

(2) Does it appear in multiple literary forms?

This criterion assumes, rightly or wrongly, that different genres were preserved in different social environments, so motifs found in multiple forms would have been deeply embedded in the earliest traditions. Within the Bible, the Flood and its hero are featured not only in historical narrative but also the Table of Nations (Genesis 10:1, 32) and Shem's genealogy (11:10), not to mention psalms (Psalm 29:10 – in past tense, the only other place in the OT where mabbul is used), prophetic poetry (Isaiah 54:9-10) and prose (Ezekiel 14:12-20). In Mesopotamia also, both the Sumerian King List and poetic epics mention the Flood. (Another of Stein's criteria, derived from form-critical theory, is the "tendencies of the developing [oral] tradition", but many now question its presuppositions.)

(3) Does it preserve details lacking significance for later Israelite audiences?

This adapts the New Testament criteria of "Aramaic linguistic phenomena" and of "Palestinian environmental phenomena", both of which would be unintelligible, and thus unattributable, to later Greek Christians (or later Israelites, in the case of Genesis 6–9). Three such details may be mentioned for the biblical Flood narrative. First, the specific landing site of the Ark on the mountains of Ararat has no apparent relevance to Israelite hearers, beyond its value for historical specificity (Longman and Walton 2018, 80), regardless of Urartu's political strength in the 9th-6th centuries B.C. (Mathews 1996,385–386; 2022, 56–57; cf. Cassuto 1964, 103-105; Day 2014, 65-66). Second, the five specific dates given for stages in the Flood have no convincing symbolic association with any dates in the later biblical calendar, the only possible exception being the first day of the first month (Genesis 8:13; Exodus 40:2, 17; Carr 2021b, 260). So, the inclusion of these dates would convey historical veracity, being more precise than any other event in all the book of Genesis, and only matched elsewhere in Scripture by Ezekiel (Wenham 1987, 179, 204; Day 2014, 63-65; for an ingenious but highly speculative unpicking of sources, see Carr 2021a, 201-204, 213-219). Third, the rare words "gopher wood" and "pitch" used for the making of the Ark (Genesis 6:14), both found only here in the Hebrew Bible (likewise "roof/ window" in 6:16), may well have been unfamiliar to an Israelite audience (compare 11:3), finding their closest linguistic echoes within the Mesopotamian environment (Longman and Walton 2018, 77-78).

(4) Does it show dissimilarity or discontinuity with both preceding and subsequent tradition?

In relation to Jesus' sayings, scholars look for distinctive features contrasting with both secondtemple Judaism of His day and early church teaching thereafter. Any features that are found become all the more noteworthy given that Jesus probably agreed with much of both traditions. In the case of the Flood, we have already touched on the large amount of dissimilarity from Mesopotamian accounts in the biblical record, not only theological dissimilarity but also in terms of descriptive details such as timescale and sources of water, making it more consistent with a Flood of worldwide extent. And the areas of broad similarity are even more illustrative of the Bible's greater concern for realism and precision, as one would expect of a historian. As for dissimilarity with both ancient Near Eastern and later Israelite theology, the idea of God making a permanent "covenant" not with Israelites but with all humans and even all animals, is surprising from the perspective of traditional Israelite theology (Genesis 17:17; Exodus 19:5; future covenants such as Isaiah 55:3-5 and Hosea 2:18 probably look back to Genesis 9), and even more alien to Mesopotamian flood stories (Longman and Walton 2018, 83). Yet the existence of a covenant typically presumes a historical point in time when it was ratified between the two parties, in view

of prior events that led to it. It cannot have relational/ theological meaning without historical context.

(5) Does it show lack of common later embellishments?

This is a further variant on the criterion of dissimilarity ("modification by Jewish Christianity"), applying to cases where later tradition has been shown to modify the account away from its original emphasis. With regard to the Flood story, Wenham (1987, 250–251, compare 130–133) reports a scholarly consensus about textual criticism of the differing numbers in the chrono-genealogies of Genesis 5 and 11: the higher numbers in the Greek Septuagint and Samaritan Pentateuch may be attempts to resolve the difficult implications of the Hebrew figures in the more original Masoretic Tradition, for example, "stretchling out the period from Shem to Abram as much as possible." This original preference for short timespans would fit with the evident interest of the biblical author in belittling the pretensions of remote antiquity by both Egyptian and Mesopotamian civilisations (page 134), by identifying them as equally young descendants of Noah. Other later embellishments common in both Jewish and pagan traditions relate to the sins and punishments of angelic beings (for example, 2 Peter 2:4–5; Jude 6–7), whereas the text in Genesis is markedly brief and ambiguous about the identity of the "sons of God", never even relating them to "angels" such as are found later in the book (Genesis 19:1; 24:7; 32:1; 48:16).

(6) Does it include embarrassing details that the author would have preferred not to include?

Also expressed as "divergent patterns from the redaction," this applies to details of such undisputed authority that the collector of the traditions did not feel free to omit them even when they do not fit well with his theological scheme. A good example of an authorial theme in the Flood narrative is the repeated emphasis on Noah's unique righteousness in his generation (Genesis 6:8-9; 7:1; 8:1, 20), superior to all other humans who died in the Flood. Yet this same Noah after the Flood calls into question his own suitability for salvation, not only getting drunk but indecently exposing himself, being treated disrespectfully by one son, and condemning his grandson in his son's place (Genesis 9:20–27). Furthermore, the confusing discrepancy between Ham and Canaan commends the details as authentic and ancient, or else one would expect this to have been resolved one way or the other, either having Canaan sin or Ham be punished (see further Mathews 2022, 395-400).

(7) Is it coherent with (not contrary to) accepted historical truths?

In the New Testament context, this criterion

enables one to find other authentic sayings, consistent with those already judged to be probably authentic based on previous criteria; an inverse criterion excludes whatever contradicts that "critically assured minimum." As for the Flood, on the one hand it is worth noting that the Genesis narrative is as a highly coherent account of a worldwide Flood, much more consistent than the Mesopotamian accounts. The case for congruence between the size and shape of the Ark, the timescale and extent of the Flood, the source of the waters, and so on, are more than adequately covered by Whitcomb and Morris (1961) and enhanced by Snelling (2009).

On the other hand, for Christians who accept the truthfulness of Scripture and especially of Jesus and His apostles, this truthfulness would include their testimony about a Flood that extinguished all life except Noah and his family (Luke 17:26-27; Hebrews 11:7; 1 Peter 3:20; 2 Peter 2:5), destroying "the world" so comprehensively that it became the historical precedent for the future destruction of the heavens and earth, albeit by fire, at Jesus' second coming (2) Peter 3:5-7, 10, 12). Only a historical worldwide Flood in Genesis is fully coherent with these clearly stated beliefs by God's trusted representatives, as discussed earlier. Conversely, however, Isaiah 56:9-10 reminds us that God "swore that the waters of Noah would not cross over the earth again," referring to the covenant of Genesis 9:11-15. If that is accepted truth, then Noah's Flood cannot have been local, because local floods have frequently crossed over the earth since that time. A local-flood reading of Genesis 7-8 is thus excluded as contrary to accepted historical truth.

(8) Is it within the realm of possibility?

As Stein notes, there is little debate over this tautologous criterion, because if something is not possible, by definition it could not have occurred! The question is really on what grounds we decide that something cannot occur, particularly when dealing with the God of the Bible who frequently proves Himself by doing what is impossible for mere humans. That said, God will typically use natural means at non-random times and unnatural intensity (for example, Exodus 9:18; 14:21; 1 Samuel 12:17), so it is legitimate to explore natural mechanisms by which He might have chosen to accomplish His will. With regard to the Flood, this criterion points to a future paper which will involve a detailed discussion of geology. We should note, though, that explanations harmonising the geological evidence with the biblical account will inevitably be incomplete or inadequate in various ways, requiring better hypotheses and further experiments, as with any scientific theory. Genesis offers a true historical record of what happened using language appropriate to that ancient time, but many details of the geophysical mechanisms are left unreported and were no doubt invisible to those who lived through the events. Our reconstructions will approximate more and more closely the truth of what happened. In the meantime, the other seven criteria confirm the inherent likelihood that the worldwide Flood recorded in Genesis 6–9 is authentic history.

Six Geology-Related Features of the Biblical Flood

Obviously, the Bible does not use technical terms from modern geology, but it is perfectly legitimate to interpret ancient historical testimony through a modern scientific lens. Scientists often rely on careful study of pre-modern writings, whether to make medical diagnoses about likely causes of death for historical figures, to identify the probable historical dates for massive volcanic eruptions that left obvious geographical traces, or to calculate the long periodic cycles of comets passing the earth, etc. Scientifically oriented archaeologists also interrogate any historical testimony they can find that might relate to their site. Likewise, we are justified in reading the Flood narrative carefully for any historical details that should have left geological evidence. The likelihood that the narrative does preserve valuable historical information is supported by both the quality of biblical history more generally and the application of our specific criteria to Genesis 6–9.

As with these other examples of science making use of historical records, one does not have to assent to the theological interpretation of past events in order to use the text as a broadly reliable description of what actually happened. We would not have to worship Roman gods to use Pliny's eyewitness testimony about the eruption of Mount Vesuvius or be Confucianists to treat ancient Chinese astronomical reports of comets as accurate. Evangelicals have far more reason to trust the Bible's history for what it says about God, but secular geologists stand to gain just as much from the biblical record of the Flood for their academic research as their Christian colleagues do. Pursuing Intelligent Design (ID) as a scientific approach, apart from questions of religion, can help biologists discover function in organisms where this can easily be overlooked in an evolutionary approach (Dembski 1999, 150, 213). Likewise for geologists, the Flood model has the potential to understand mineral deposits more accurately and therefore exploit them more efficiently. However, according to an editorial by Nield (2008) in the UK Geological Society's monthly news-related publication—Geoscientist—the Society on principle will not accept any article that even hints at a universal Flood or that the earth is young; sure enough, no such ideas are found in their technical journal. Since the Society was founded to enhance

recovery of minerals, it is to their detriment that they ignore an approach that could be helpful. The topic has already been aired with respect to the origin of oil (Matthews 2008). The American Association of Petroleum Geologists holds a similar stance with its technical *Bulletin* only containing articles which follow the majority traditional view of the origin of oil—by processes involving long-timescale conversion of organic matter. However, there are occasions when their news-related monthly *Explorer* is willing to acknowledge that there are, what they loosely call, old-age and young-age geologists within the industry (Matthews 2006). The issues will be more fully developed in the proposed subsequent paper.

It is therefore even more disappointing when geologists who are practicing Christians, even selfconfessed evangelicals of the Group 2 variety (for example, M.R. Johnson 1988; Young 1995; White 2000; Moshier 2018), are unwilling to engage more than superficially with Group 1 Christian geologists about evidence for the Flood model. Instead, they criticise Flood geologists for not discussing their findings in the scientific literature (Johnson 1988b, 53), as if the academic peer-review process has already shown that such ideas are not worth the time. However, as noted above, there are many scholarly organizations that specifically reject any submissions offering evidence for a young earth or a global Flood, or challenging conventional ideas about evolution. Occasionally, some papers do get through, such as a conference paper providing information on shortlived carbon-14 found in dinosaur bones, but the abstract was later removed from the website (Wieland 2013). Similar skepticism about preservation of soft tissue in dinosaur bones supposedly millions of years old was only alleviated when the evangelical who discovered it assured the establishment that she remained a convinced evolutionist (Yeoman 2006). Due to this ideological censorship (Frankowski 2008), Flood geology research can only be pursued within specialist creationist scientific journals and conferences open to such topics, for the wider benefit of the discipline of geology.

The philosophical resistance to considering historical evidence from the Bible, despite its powerful claims to historical reliability and its proven transformative effect on individuals and cultures worldwide and throughout the ages, suggests something deeper than simple disagreement over the geological evidence. No scholar can claim objectivity and impartiality as an interpreter of the evidence. The Bible describes knowledge as being in direct relation to moral allegiance. Even in mankind's first sin in the Garden of Eden, the temptation was to procure knowledge independently of God. Jesus taught, "If you continue in My word, then you are

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truly disciples of Mine; and you will know the truth, and the truth will make you free" (John 8:31–32; also 14:15–17). Obedience to Jesus' instructions qualifies people to know the truth, which is only possible by revelation. Those who submit their intellect to the apparent foolishness of God's revelation will then be granted the wisdom of God, deliberately contrary to worldly wisdom so that humans cannot boast in themselves (1 Corinthians 1:18–2:16; 3:18–20). On the other hand, those who are perfectly able to see and understand general revelation in the created world, and yet reject a relationship with its Creator, find their foolish minds darkened and become "futile in their speculations" (Romans 1:18–32; also 2 Thessalonians 2:8–15).

"Yet we do speak wisdom among those who are mature; a wisdom, however, not of this age nor of the rulers of this age, who are passing away; but we speak God's wisdom in a mystery, the hidden wisdom which God predestined before the ages to our glory..." (1 Corinthians 2:6-7). True understanding of how God formed and prepared the earth for our benefit, even by means of His judgements, is available for those who are first willing to be mocked as foolish for trusting in God's testimony. He delights in hiding profound insights from the wise and learned and revealing them to His 'foolish' children (Matthew 11:25-27; 1 Corinthians 3:18). In that case, willingness to be mocked is our surest protection from becoming mockers, when we lose our motivation to seek the return of Jesus in glory and worldwide judgement because we prefer to pursue our own priorities and friendship with the world. Peter prophesied that such end-time mockers will prefer to extrapolate uniformitarian observations of recent gradual changes into the remote past and future-as Lyell (1830, 269-270) quoted Hutton approvingly: "no signs of a beginning, no prospect of an end." Peter continues that those who do so will fail to interpret rightly the plentiful evidence for the catastrophic Flood in the days of Noah (2 Peter 3:3-7). That is when we are in the greatest danger of suffering the same fate "as in the days of Noah," a time when people similarly assumed that life would continue as it always had (Luke 17:27). True knowledge will always come from and lead to greater dependence upon Jesus and His Word.

Turning back to the historical account of Genesis 1–11, on a face-value reading of the text, we will find that the geological setting before and after the Flood is also important for understanding the mechanisms and processes of the Flood itself:

(a) The Flood took place around 1,600 years after a mature Creation based on the genealogy in Genesis 5. The cycle of birth, begetting children, and death for many generations (compare Matthew 24:38–39), and the one-week warning for Noah to board the Ark (Genesis 7:1–4), indicates an abrupt change to a world used to a stable environment of slow gradual change ever since Creation Week. We can assume that the land, waters, and air were fully inhabited by living creatures and humans before the Flood, according to the creation blessing of fruitfulness and multiplication (Genesis 1:20–28).

(b) After approximately one year of total devastation by water rising and then falling, the earth resettled into relative stability for about 4,400 years up to the present day, based on the genealogy in Genesis 11, subsequent biblical data and external history.

The Bible offers these six points for geological examination for those who doubt the story:

- (1) New sources of water were released from the "fountains of the great deep" bursting open alongside the "windows of heaven" opening (Genesis 7:11).
- (2) There was torrential rain for 40 days and nights that caused the Flood waters to rise, perhaps up to 150 days (Genesis 7:4, 12, 17; 8:2).
- (3) There was rapid coverage of the entire landscape by water, taking five months to fully peak (Genesis 7:17-24; 7:11 + 8:4).
- (4) All high mountains of the pre-Flood world were covered with water to a depth of "fifteen cubits," nearly seven meters (Genesis 7:19–20).
- (5) All creatures that needed to breathe air drowned, except those on the Ark (Genesis 7:21–23).
- (6) The Flood water retreated rapidly, or continuously back and forth (Barrick 2008, 269–272), in just over seven months (Genesis 8:1–14), until the ground was dry enough for Noah and the animals to disembark and resume normal life.

It is doubtful if geology can ever confirm that the Flood took exactly one year and ten days, with five months of rising waters and seven months of falling waters. If it had been much longer, food supplies in the Ark would no doubt have failed. However, what will be obvious in the geological evidence is that the Flood must have been a short-lived event with rapid movements of water and sediment deposition and drying, certainly not even a decade-long event. Nor could it have been a few-day localized deluge, in which case there would be no need for an elaborate Ark.

For much more detailed analysis of the chronological questions, particularly the disagreement about the date of the peak of the Flood (on the 40th day, or the 150th day, or spanning the two, referenced in Barrick 2008), see Boyd and Snelling (2014). This highly scholarly, 828-page book is only the first of three projected books, setting the stage with text and linguistic methodology for a

second book on the actual calendrical sequence of the Flood in its ancient Near Eastern context, and a third that considers when the Flood occurred with respect to world history.

The proposed subsequent paper, addressing the geological details, will pay special attention to the key observation about the "fountains of the great deep" within the biblical sequence of events. This has already been recognized as a major source for the vast amounts of water involved, but up until now it has not been appreciated as a significant part of the explanation for the various types of sediment, and for the mechanism for the Flood's progressive advance across the earth.

Summary

In this paper, we have sought to explain the reasons for a clear divergence of evangelical Christian views about the Flood of Genesis 6-9. Mainstream Christian interpretation was unanimous up until and even beyond the rise of the Enlightenment in the eighteenth century, believing that the Bible records a recent global Flood. A philosophical rejection of revelation in favour of independent human reason then caused the modern discipline of geology to dismiss the Bible's catastrophic model for geological sedimentary layers and fossils and insist on uniformitarianism with gradual changes over 'deep time.' Flood geologists were intimidated into silence for around a century (c. 1830–1930), Group 1 theologians held resolutely to a traditional church interpretation, but Group 2 theologians sought compromise with secular geology and later also new higher-critical theories about the Bible. Group 1 views were revitalized by a handful of critics of geological uniformitarianism culminating in Whitcomb and Morris (1961), but Group 2 adherents have continued to avoid detailed discussion about the geological evidence.

The uniform Christian tradition of interpretation about the Flood until recently, on which Jesus and His apostles evidently agreed also, is a difficult fact to deal with for Group 2 scholars. They argue that this traditional view lacked the knowledge of ancient Near Eastern literature recently discovered, which casts the Bible in a new light, though they are not immune to misunderstanding that literature either. They also try to restrict the doctrine of the perspicuity of Scripture to just matters relevant to salvation, failing to recognize that biblical salvation refers to all of creation suffering from human sin, as it did at the Flood. Even a proper comparison of the Bible and parallel flood accounts reveals that, both in their differences and similarities, the Bible's version of the story is more consistent, realistic and precise in its depiction of a worldwide Flood, confirming the new consensus even among Group 2 scholars that the text

describes a worldwide Flood, but also undermining their idea that it is using worldwide and cosmic language merely as deliberate hyperbole. On the contrary, the Bible presents the worldwide Flood as a necessary historical backdrop for a worldwide covenant, a worldwide human family, and another future worldwide judgement.

Group 2 scholars are torn between the clear biblical depiction of a global Flood and the claim of mainstream geologists that there is no evidence for it. They try to argue that general revelation in creation can trump special revelation in Scripture. But in downplaying the importance of history for biblical theology, they may as well surrender their evangelical convictions altogether and join Group 3 for whom historical facts are irrelevant and only theology matters. Those who insist on being guided to their interpretation of Scripture by the consensus of modern geology are perhaps unaware of its philosophical prejudices and censoring of Flood-related views.

On the basis of the proven historical value of biblical records, we can apply eight different "criteria of authenticity" to the Genesis Flood story specifically, to decide whether we should include it within the genre of reliable history: multiple attestation, multiple literary forms, details irrelevant to later audiences, dissimilarity with preceding and subsequent tradition, lack of later embellishments, embarrassing details preserved, coherent with accepted historical truths, and within the realm of possibility. The positive results then justify its use by scientists interested in certain geological questions that can be informed by its ancient testimony. But we should not be unaware that mainstream resistance to the evident value of the biblical record relates to people's personal response to the God of truth, as Scripture says it will.

Finally, we have offered six geologically relevant features of the biblical Flood story initiated by the "fountains of the great deep:" fountains breaking open, torrential rain, rapid coverage of whole landscape, high mountains covered, air-breathing creatures drowned, and rapid retreat of waters. These will be examined on the basis of material evidence in geology as we now move on to our proposed subsequent paper. We invite theologians in Group 2 (and perhaps Group 3) to join us in that geological exploration, discovering the practical plausibility and value of the biblical account that have been overlooked.

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