

Rediscovering the Historical Jesus: The Evidence for Jesus

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SUMMARY

Five reasons are presented for thinking that critics who accept the historical credibility of the gospel accounts of Jesus do not bear a special burden of proof relative to more skeptical critics. Then the historicity of a few specific aspects of Jesus' life are addressed, including his radical self-concept as the divine Son of God, his role as a miracle-worker, his trial and crucifixion, and his resurrection from the dead.

REDISCOVERING THE HISTORICAL JESUS: PRESUPPOSITIONS AND PRETENSIONS OF THE JESUS SEMINAR

Last time we saw that the New Testament documents are the most important historical sources for Jesus of Nazareth. The so-called apocryphal gospels are forgeries which came much later and are for the most part elaborations of the four New Testament gospels.

This doesn't mean that there aren't sources outside the Bible which refer to Jesus. There are. He's referred to in pagan, Jewish, and Christian writings outside the New Testament. The Jewish historian Josephus is especially interesting. In the pages of his works you can read about New Testament people like the high priests Annas and Caiaphas, the Roman governor Pontius Pilate, King Herod, John the Baptist, even Jesus himself and his brother James. There have also been interesting archaeological discoveries as well bearing on the gospels. For example, in 1961 the first archaeological evidence concerning Pilate was unearthed in the town of Caesarea; it was an inscription of a dedication bearing Pilate's name and title. Even more recently, in 1990 the actual tomb of Caiaphas, the high priest who presided over Jesus's trial, was discovered south of Jerusalem. Indeed, the tomb beneath the Church of the Holy Sepulchre in Jerusalem is in all probability the tomb in which Jesus himself was laid by Joseph of Arimathea following the crucifixion. According to Luke Johnson, a New Testament scholar at Emory University,

Even the most critical historian can confidently assert that a Jew named Jesus worked as a teacher and wonder-worker in Palestine during the reign of Tiberius, was executed by crucifixion under the prefect Pontius Pilate and continued to have followers after his death. [1]

Still, if we want any details about Jesus's life and teachings, we must turn to the New Testament. Extra-biblical sources *confirm* what we read in the gospels, but they don't really tell us anything *new*. The question then must be: how historically reliable are the New Testament documents?

Burden of Proof

Here we confront the very crucial question of the burden of proof. Should we assume that the gospels are reliable unless they are proven to be unreliable? Or should we assume the gospels are unreliable unless they are proven to be reliable? Are they innocent until proven guilty or guilty until proven innocent? Sceptical scholars almost always assume that the gospels are guilty until proven innocent, that is, they assume that the gospels are unreliable unless and until they are proven to be correct concerning some particular fact. I'm not exaggerating here: this really is the procedure of sceptical critics.

But I want to list five reasons why I think we ought to assume that the gospels are reliable until proven wrong:

1. *There was insufficient time for legendary influences to expunge the historical facts.* The interval of time between the events themselves and recording of them in the gospels is too short to have allowed the memory of what had or had not actually happened to be erased.

2. *The gospels are not analogous to folk tales or contemporary "urban legends."* Tales like those of Paul Bunyan and Pecos Bill or contemporary urban legends like the "vanishing hitchhiker" rarely concern actual historical individuals and are thus not analogous to the gospel narratives.

3. *The Jewish transmission of sacred traditions was highly developed and reliable.* In an oral culture like that of first century Palestine the ability to memorize and retain large tracts of oral tradition was a highly prized and highly developed skill. From the earliest age children in the home, elementary school, and the synagogue were taught to memorize faithfully sacred tradition. The disciples would have exercised similar care with the teachings of Jesus.

4. *There were significant restraints on the embellishment of traditions about Jesus, such as the presence of eyewitnesses and the apostles' supervision.* Since those who had seen and heard Jesus continued to live and the tradition about Jesus remained under the supervision of the apostles, these factors would act as a natural check on tendencies to elaborate the facts in a direction contrary to that preserved by those who had known Jesus.

5. *The Gospel writers have a proven track record of historical reliability.*

I don't have enough time to talk about all of these. So let me say something about the first and the last points.

1. *There was insufficient time for legendary influences to expunge the historical facts.* No modern

scholar thinks of the gospels as bald-faced lies, the result of a massive conspiracy. The only place you find such conspiracy theories of history is in sensationalist, popular literature or former propaganda from behind the Iron Curtain. When you read the pages of the New Testament, there's no doubt that these people sincerely believed in the truth of what they proclaimed. Rather ever since the time of D. F. Strauss, sceptical scholars have explained away the gospels as legends. Like the child's game of telephone, as the stories about Jesus were passed on over the decades, they got muddled and exaggerated and mythologized until the original facts were all but lost. The Jewish peasant sage was transformed into the divine Son of God.

One of the major problems with the legend hypothesis, however, which is almost never addressed by sceptical critics, is that the time between Jesus's death and the writing of the gospels is just too short for this to happen. This point has been well-explained by A. N. Sherwin-White in his book *Roman Society and Roman Law in the New Testament*. [2]Professor Sherwin-White is not a theologian; he is a professional historian of times prior to and contemporaneous with Jesus. According to Sherwin-White, the sources for Roman and Greek history are usually biased and removed one or two generations or even centuries from the events they record. Yet, he says, historians reconstruct with confidence the course of Roman and Greek history. For example, the two earliest biographies of Alexander the Great were written by Arrian and Plutarch more than 400 years after Alexander's death, and yet classical historians still consider them to be trustworthy. The fabulous legends about Alexander the Great did not develop until during the centuries *after* these two writers. According to Sherwin-White, the writings of Herodotus enable us to determine the rate at which legend accumulates, and the tests show that even two generations is too short a time span to allow legendary tendencies to wipe out the hard core of historical facts. When Professor Sherwin-White turns to the gospels, he states that for the gospels to be legends, the rate of legendary accumulation would have to be "unbelievable." More generations would be needed.

In fact, adding a time gap of two generations to Jesus's death lands you in the second century, just when the apocryphal gospels begin to appear. These do contain all sorts of fabulous stories about Jesus, trying to fill in the years between his boyhood and his starting his ministry, for example. These are the obvious legends sought by the critics, not the biblical gospels.

This point becomes even more devastating for skepticism when we recall that the gospels themselves use sources that go back even closer to the events of Jesus's life. For example, the story of Jesus's suffering and death, commonly called the Passion Story, was probably not originally written by Mark. Rather Mark used a source for this narrative. Since Mark is the earliest

gospel, his source must be even earlier. In fact, Rudolf Pesch, a German expert on Mark, says the Passion source must go back to at least AD 37, just seven years after Jesus's death. [3]

Or again, Paul in his letters hands on information concerning Jesus about his teaching, his Last Supper, his betrayal, crucifixion, burial, and resurrection appearances. Paul's letters were written even before the gospels, and some of his information, for example, what he passes on in his first letter to the Corinthian church about the resurrection appearances, has been dated to within five years after Jesus's death. It just becomes irresponsible to speak of legends in such cases.

5. *The Gospel writers have a proven track record of historical reliability.* Again I only have time to look at one example: Luke. Luke was the author of a two-part work: the Gospel of Luke and the Acts of the Apostles. These are really one work and are separated in our Bibles only because the church grouped the gospels together in the New Testament. Luke is the gospel writer who writes most self-consciously as an historian. In the preface to this work he writes:

Inasmuch as many have undertaken to compile a narrative of the things which have been accomplished among us, just as they were delivered to us by those who from the beginning were eyewitnesses and ministers of the word, it seemed good to me also, having followed all things closely for some time past, to write an orderly account for you, most excellent Theophilus, that you may know the truth concerning the things of which you have been informed. (Lk. 1.1-4)

This preface is written in classical Greek terminology such as was used by Greek historians; after this Luke switches to a more common Greek. But he has put his reader on alert that he can write, should he wish to, like the learned historian. He speaks of his lengthy investigation of the story he's about to tell and assures us that it is based on eyewitness information and is accordingly the truth.

Now who was this author we call Luke? He was clearly not an eyewitness to Jesus's life. But we discover an important fact about him from the book of Acts. Beginning in the sixteenth chapter of Acts, when Paul reaches Troas in modern-day Turkey, the author suddenly starts using the first-person plural: "we set sail from Troas to Samothrace," "we remained in Philippi some days," "as we were going to the place of prayer," *etc.* The most obvious explanation is that the author had joined Paul on his evangelistic tour of the Mediterranean cities. In chapter 21 he accompanies Paul back to Palestine and finally to Jerusalem. What this means is that the author of Luke-Acts was in fact in first hand contact with the eyewitnesses of Jesus's life and ministry in Jerusalem. Sceptical critics have done back-flips to try to avoid this conclusion. They say that the use of the first-person plural in Acts should not be taken literally; it's just a literary device which is common in ancient sea

voyage stories. Never mind that many of the passages in Acts are not about Paul's sea voyage, but take place on land! The more important point is that this theory, when you check it out, turns out to be sheer fantasy. [4] There just was no literary device of sea voyages in the first person plural—the whole thing has been shown to be a scholarly fiction! There is no avoiding the conclusion that Luke-Acts was written by a traveling companion of Paul who had the opportunity to interview eyewitnesses to Jesus's life while in Jerusalem. Who were some of these eyewitnesses? Perhaps we can get some clue by subtracting from the Gospel of Luke everything found in the other gospels and seeing what is peculiar to Luke. What you discover is that many of Luke's peculiar narratives are connected to women who followed Jesus: people like Joanna and Susanna, and significantly, Mary, Jesus's mother.

Was the author reliable in getting the facts straight? The book of Acts enables us to answer that question decisively. The book of Acts overlaps significantly with secular history of the ancient world, and the historical accuracy of Acts is indisputable. This has recently been demonstrated anew by Colin Hemer, a classical scholar who turned to New Testament studies, in his book *The Book of Acts in the Setting of Hellenistic History*. [5] Hemer goes through the book of Acts with a fine-toothed comb, pulling out a wealth of historical knowledge, ranging from what would have been common knowledge down to details which only a local person would know. Again and again Luke's accuracy is demonstrated: from the sailings of the Alexandrian corn fleet to the coastal terrain of the Mediterranean islands to the peculiar titles of local officials, Luke gets it right. According to Professor Sherwin-White, "For Acts the confirmation of historicity is overwhelming. Any attempt to reject its basic historicity even in matters of detail must now appear absurd." [6] The judgement of Sir William Ramsay, the world-famous archaeologist, still stands: "Luke is a historian of the first rank This author should be placed along with the very greatest of historians." [7] Given Luke's care and demonstrated reliability as well as his contact with eyewitnesses within the first generation after the events, this author is trustworthy.

On the basis of the five reasons I listed, we are justified in accepting the historical reliability of what the gospels say about Jesus unless they are proven to be wrong. At the very least, we cannot assume they are wrong until proven right. The person who denies the gospels' reliability must bear the burden of proof.

Specific Aspects of Jesus's Life

Now by the very nature of the case, it will be impossible to say a whole lot more beyond this to

prove that certain stories in the gospels are historically true. How could you prove, for example, the story of Jesus's visiting Mary and Martha? You just have here a story told by a reliable author in a position to know and no reason to doubt the historicity of the story. There's not much more to say. Nevertheless, for many of the key events in the gospels, a great deal more can be said. What I'd like to do now is take a few of the important aspects of Jesus in the gospels and say a word about their historical credibility.

1. *Jesus's Radical Self-Concept as the Divine Son of God.* Radical critics deny that the historical Jesus thought of himself as the divine Son of God. They say that after Jesus's death, the early church claimed that he had said these things, even though he hadn't.

The big problem with this hypothesis is that it is inexplicable how monotheistic Jews could have attributed divinity to a man they had known, if he never claimed any such things himself. Monotheism is the heart of the Jewish religion, and it would have been blasphemous to say that a human being was God. Yet this is precisely what the earliest Christians did proclaim and believe about Jesus. Such a claim must have been rooted in Jesus's own teaching.

And in fact, the majority of scholars do believe that among the historically authentic words of Jesus—these are the words in the gospels which the Jesus Seminar would print in red—among the historically authentic words of Jesus are claims that reveal his divine self-understanding. One could give a whole lecture on this point alone; but let me focus on Jesus's self-concept of being the unique, divine Son of God.

Jesus's radical self-understanding is revealed, for example, in his parable of the wicked tenants of the vineyard. Even sceptical scholars admit the authenticity of this parable, since it is also found in the Gospel of Thomas, one of their favorite sources. In this parable, the owner of the vineyard sent servants to the tenants of the vineyard to collect its fruit. The vineyard symbolizes Israel, the owner is God, the tenants are the Jewish religious leaders, and the servants are prophets sent by God. The tenants beat and reject the owner's servants. Finally, the owner says, "I will send my only, beloved son. They will listen to my son." But instead, the tenants kill the son because he is the heir to the vineyard. Now what does this parable tell us about Jesus's self-understanding? He thought of himself as God's special son, distinct from all the prophets, God's final messenger, and even the heir to Israel. This is no mere Jewish peasant!

Jesus's self-concept as God's son comes to explicit expression in Matthew 11.27: "All things have been delivered to me by my Father; and no one knows the Son except the Father; and no one

knows the Father except the Son and anyone to whom the Son chooses to reveal Him." Again there is good reason to regard this as an authentic saying of the historical Jesus. It is drawn from an old source which was shared by Matthew and Luke, which scholars call the Q document. Moreover, it is unlikely the Church invented this saying because it says that the Son is unknowable—"no one knows the Son except the Father"—, but for the post-Easter church we *can* know the Son. So this saying is not the product of later Church theology. What does this saying tell us about Jesus's self-concept? He thought of himself as the exclusive and absolute Son of God and the only revelation of God to mankind! Make no mistake: if Jesus wasn't who he said he was, he was crazier than David Koresh and Jim Jones put together!

Finally, I want to consider one more saying: Jesus's saying on the date of his second coming in Mark 13.32: "But of that day or that hour no man knows, not even the angels in heaven, nor the Son, but only the Father." This is an authentic saying of the historical Jesus because the later Church, which regarded Jesus as divine, would never have invented a saying ascribing limited knowledge or ignorance to Jesus. But here Jesus says he doesn't know the time of his return. So what do we learn from this saying? It not only reveals Jesus's consciousness of being *the* one Son of God, but it presents us with an ascending scale from men to the angels to the Son to the Father, a scale on which Jesus transcends any human being or angelic being. This is really incredible stuff! Yet it is what the historical Jesus believed. And this is only one facet of Jesus's self-understanding. C. S. Lewis was right when he said,

A man who was merely a man and said the sort of things Jesus said would not be a great moral teacher. He would either be a lunatic—on the level with the man who says he is a poached egg—or else he would be the Devil of Hell. You must make your choice. Either this man was and is the Son of God: or else a madman or something worse. You can shut him up for a fool, you can spit at him and kill him as a demon; or you can fall at his feet and call him Lord and God. But let us not come with any patronizing nonsense about his being a great human teacher. He has not left that open to us. [8]

2. *Jesus's Miracles.* Even the most sceptical critics cannot deny that the historical Jesus carried out a ministry of miracle-working and exorcism. Rudolf Bultmann, one of the most sceptical scholars this century has seen, wrote back in 1926:

Most of the miracle stories contained in the gospels are legendary or at least are dressed up with legends. But there can be no doubt that Jesus did such deeds, which were, in his and his

contemporaries' understanding, miracles, that is, deeds that were the result of supernatural, divine causality. Doubtless he healed the sick and cast out demons. [9]

Back in Bultmann's day the miracle stories were thought to be influenced by stories of mythological heroes and, hence, at least in part legendary. But today it is recognized that the hypothesis of mythological influence was historically incorrect. Craig Evans, a well-known Jesus scholar, says that "the older notion" that the miracle stories were the product of mythological divine man ideas "has been largely abandoned." [10] He says, "It is no longer seriously contested" "that miracles played a role in Jesus's ministry." The only reason left for denying that Jesus performed literal miracles is the presupposition of anti-supernaturalism, which is simply unjustified.

3. *Jesus's Trial and Crucifixion.* According to the gospels Jesus was condemned by the Jewish high court on the charge of blasphemy and then delivered to the Romans for execution for the treasonous act of setting himself up as King of the Jews. Not only are these facts confirmed by independent biblical sources like Paul and the Acts of the Apostles, but they are also confirmed by extra-biblical sources. From Josephus and Tacitus, we learn that Jesus was crucified by Roman authority under the sentence of Pontius Pilate. From Josephus and Mara bar Serapion we learn that the Jewish leaders made a formal accusation against Jesus and participated in events leading up to his crucifixion. And from the Babylonian Talmud, Sanhedrin 43a, we learn that Jewish involvement in the trial was explained as a proper undertaking against a heretic. According to Johnson, "The support for the mode of his death, its agents, and perhaps its coagents, is overwhelming: Jesus faced a trial before his death, was condemned and executed by crucifixion." [11] The crucifixion of Jesus is recognized even by the Jesus Seminar as "one indisputable fact." [12]

But that raises the very puzzling question: Why was Jesus crucified? As we have seen, the evidence indicates that his crucifixion was instigated by his blasphemous claims, which to the Romans would come across as treasonous. That's why he was crucified, in the words of the plaque that was nailed to the cross above his head, as "The King of the Jews." But if Jesus was just a peasant, cynic philosopher, just a liberal social gadfly, as the Jesus Seminar claims, then his crucifixion becomes inexplicable. As Professor Leander Keck of Yale University has said, "The idea that this Jewish cynic (and his dozen hippies) with his demeanor and aphorisms was a serious threat to society sounds more like a conceit of alienated academics than sound historical judgement." [13] New Testament scholar John Meier is equally direct. He says that a bland Jesus who just went about spinning out parables and telling people to look at the lilies of the field-- "such

a Jesus," he says, "would threaten no one, just as the university professors who create him threaten no one." [14] The Jesus Seminar has created Jesus who is incompatible with the one indisputable fact of his crucifixion.

4. *The resurrection of Jesus.* It seems to me that there are four established facts which constitute inductive evidence for the resurrection of Jesus:

Fact #1: After his crucifixion, Jesus was buried by Joseph of Arimathea in the tomb. This fact is highly significant because it means that the location of Jesus's tomb was known to Jew and Christian alike. In that case it becomes inexplicable how belief in his resurrection could arise and flourish in the face of a tomb containing his corpse. According to the late John A. T. Robinson of Cambridge University, the honorable burial of Jesus is one of "the earliest and best-attested facts about Jesus." [15]

Fact #2: On the Sunday morning following the crucifixion, the tomb of Jesus was found empty by a group of his women followers. According to Jakob Kremer, an Austrian specialist on the resurrection, "By far most exegetes hold firmly to the reliability of the biblical statements concerning the empty tomb." [16] As D. H. van Daalen points out, "It is extremely difficult to object to the empty tomb on historical grounds; those who deny it do so on the basis of theological or philosophical assumptions." [17]

Fact #3: On multiple occasions and under various circumstances, different individuals and groups of people experienced appearances of Jesus alive from the dead. This is a fact that is almost universally acknowledged among New Testament scholars today. Even Gert Lüdemann, perhaps the most prominent current critic of the resurrection, admits, "It may be taken as historically certain that Peter and the disciples had experiences after Jesus's death in which Jesus appeared to them as the risen Christ." [18]

Finally, *fact #4: The original disciples believed that Jesus was risen from the dead despite their having every reason not to.* Despite having every predisposition to the contrary, it is an undeniable fact of history that the original disciples believed in, proclaimed, and were willing to go to their deaths for the fact of Jesus's resurrection. C. F. D. Moule of Cambridge University concludes that we have here a belief which nothing in terms of prior historical influences can account for—apart from the resurrection itself. [19]

Any responsible historian, then, who seeks to give an account of the matter, must deal with these four independently established facts: the honorable burial of Jesus, the discovery of his empty

tomb, his appearances alive after his death, and the very origin of the disciples' belief in his resurrection and, hence, of Christianity itself. I want to emphasize that these four facts represent, not the conclusions of conservative scholars, nor have I quoted conservative scholars, but represent rather the majority view of New Testament scholarship today. The question is: how do you best explain these facts?

Now this puts the sceptical critic in a somewhat desperate situation. For example, some time ago I had a debate with a professor at the University of California, Irvine, on the historicity of the resurrection of Jesus. He had written his doctoral dissertation on the subject and was thoroughly familiar with the evidence. He could not deny the facts of Jesus's honorable burial, his empty tomb, his post-mortem appearances, and the origin of the disciples' belief in his resurrection. Therefore, his only recourse was to come up with some alternative explanation of these facts. And so he argued that *Jesus had an unknown identical twin brother* who was separated from him at birth, came back to Jerusalem just at the time of the crucifixion, stole Jesus's body out of the grave, and presented himself to the disciples, who mistakenly inferred that Jesus was risen from the dead! Now I won't go into how I went about refuting his theory, but I think that this theory is instructive because it shows to what desperate lengths skepticism must go in order to deny the historicity of the resurrection of Jesus. In fact, the evidence is so powerful that one of today's leading *Jewish* theologians Pinchas Lapide has declared himself convinced on the basis of the evidence that the God of Israel raised Jesus from the dead! [20]

Conclusion

In summary, the gospels are not only trustworthy documents in general, but as we look at some of the most important aspects of Jesus in the gospels, like his radical personal claims, his miracles, his trial and crucifixion, and his resurrection, their historical veracity shines through. God has acted in history, and we can know it.

Footnotes:

[1]

See chaps 1-2 of Paul Copan and William Lane Craig, *Creation out of Nothing: A Biblical, Philosophical, and Scientific Exploration* (Grand Rapids, Mich.: Baker Bookhouse, 2004).

[2]

See again Copan and Craig, *Creation out of Nothing*, chap. 3.

[\[3\]](#)

See William Lane Craig, *The Kalām Cosmological Argument* (London: Macmillan & Co., 1979).

[\[4\]](#)

“creator omnium invisibilium et visibilium, spiritualium et corporalium, qui sua omnipotenti virtute simul ab initio temporis, utramque de nihilo condidit creaturam, spiritualem et corporalem” (Concilium Lateranense IV, *Constitutiones 1. De fide catholica*).

[\[5\]](#)

See once more Copan and Craig, *Creation out of Nothing*, chaps. 4-6.

[\[6\]](#)

Einstein, “Cosmological Considerations on the General Theory of Relativity,” in *The Principle of relativity*, by A. Einstein, *et. al.*, with Notes by A. Sommerfeld, trans. W. Perrett and J. B. Jefferey (re ed.: New York: Dover Publications, 1952), 177-88.

[\[7\]](#)

Friedman, “Über die Krümmung des Raumes,” *Zeitschrift für Physik* 10 (1922): 377-86; G. Lemaître, “Un univers homogène de masse constante et de rayon croissant, rendant compte de la vitesse radiale des nébuleuses extragalactiques,” *Annales de la Société scientifique de Bruxelles* 47 (1927): 49-59.

[\[8\]](#)

Gregory L. Naber, *Spacetime and Singularities: an Introduction* (Cambridge: Cambridge University Press, 1988), 126-7.

[\[9\]](#)

E. Hubble, “A Relation between Distance and Radial Velocity among Extra-galactic Nebulae,” *Proceedings of the National Academy of Sciences* 15 (1929): 168-73.

[\[10\]](#)

John A. Wheeler, “Beyond the Hole,” in *Some Strangeness in the Proportion*, ed. Harry Woolf (Reading, Mass.: Addison-Wesley, 1980), 354.

[\[11\]](#)

P. C. W. Davies, "Spacetime Singularities in Cosmology," in *The Study of Time III*, ed. J. T. Fraser (New York: Springer Verlag, 1978), 78-79.

[\[12\]](#)

John Barrow and Frank Tipler, *The Anthropic Cosmological Principle* (Oxford: Clarendon Press, 1986), 442.

[\[13\]](#)

Principally the addition of an early inflationary era and an accelerating expansion.

[\[14\]](#)

William Lane Craig and James Sinclair, "The *Kalam* Cosmological Argument," in *The Blackwell Companion to Natural Theology*, ed. Wm. L. Craig and J. P. Moreland (Oxford: Wiley-Blackwell, 2009), pp. 101-201; idem, "On Non-Singular Spacetimes and the Beginning of the Universe," in *Scientific Approaches to the Philosophy of Religion*, ed. Yujin Nagasawa, Palgrave Frontiers in Philosophy of Religion (London: Macmillan, 2012), pp. 95-142.

[\[15\]](#)

Borde, A. Guth, A. Vilenkin, "Inflationary Spacetimes Are Incomplete in Past Directions," *Physical Review Letters* 90 (2003): 151301, <http://arxiv.org/abs/gr-qc/0110012>.

[\[16\]](#)

Alexander Vilenkin, "Did the universe have a beginning?" <http://www.youtube.com/watch?v=NXCQelhKJ7A>. Cf. Audrey Mithani and Alexander Vilenkin, "Did the universe have a beginning?" arXiv:1204.4658v1 [hep-th] 20 Apr 2012, p. 1, where they state: "None of these scenarios can actually be past-eternal."

[\[17\]](#)

Alexander Vilenkin, "The Beginning of the Universe," *Inference: International Review of Science* 1/ 4 (Oct. 23, 2015), <http://inference-review.com/article/the-beginning-of-the-universe>.

[\[18\]](#)

Robert Stewart, ed., *God and Cosmology: William Lane Craig and Sean Carroll in Dialogue* (Minneapolis: Fortress Press, 2016), p. 70. The Greer-Heard Forum itself was held in

2014.

[\[19\]](#)

Ibid.

[\[20\]](#)

Ibid.

[\[21\]](#)

Alan Guth to Daniel Came, 19 March 2017, cited by Came in our debate “Does God Exist?” at Trinity College, Dublin, March 23, 2017, available at <https://www.facebook.com/reasonablefaithorg/videos/10154698973823229/> .

[\[22\]](#)

See Alexander Vilenkin, “Arrows of time and the beginning of the universe,” arXiv:1305.3836v2 [hep-th] 29 May 2013; also Craig and Sinclair, “The *Kalām* Cosmological Argument,” p. 157.

[\[23\]](#)

A. Vilenkin, cited in “Why physicists can’t avoid a creation event,” by [Lisa Grossman](#), *New Scientist* (January 11, 2012).

[\[24\]](#)

“If indeed all past-directed geodesics encounter a quantum spacetime region where the notions of time and causality no longer apply, I would characterize such a region as the beginning of the universe” (A. Vilenkin to William Lane Craig, personal correspondence, December 8, 2013).

[\[25\]](#)

Christopher Isham observes that although quantum cosmogonies “differ in their details they all agree on the idea that space and time emerge in some way from a purely quantum-mechanical region which can be described in some respects as if it were a classical, imaginary-time four-space” (C. J. Isham, “Quantum Theories of the Creation of the Universe,” in *Quantum Cosmology and the Laws of Nature*, second ed., ed. Robert J. Russell *et al.* [Vatican City State: Vatican Observatory, 1996], p. 75). This feature of quantum cosmogony is very problematic, since diachronic emergence of time is obviously incoherent (J. Butterfield and C. J. Isham, “On the Emergence of Time in Quantum Gravity,” in *The Arguments of Time*, ed. J. Butterfield [Oxford

University Press, 1999], pp. 111-68; Vincent Lam and Michael Esfeld, “A dilemma for the emergence of spacetime in canonical quantum gravity,” *Studies in History and Philosophy of Modern Physics* 44 [2013]: 286–293; Reiner Hedrich, “Hat die Raumzeit Quanteneigenschaften? – Emergenztheoretische Ansätze in der Quantengravitation,” in *Philosophie der Physik*, ed. M. Esfeld [Berlin: Suhrkamp, forthcoming], pp. 287-305). But how can one make sense of a synchronic emergence of time as a supervenient reality in the context of cosmogony? The authors cited do not tell us. The best sense I can make of it is to say that the Euclidian description is a lower-level description of classical spacetime prior to the Planck time. (One recalls Hawking’s remark that when we go back to the real time in which we live, there still would be singularities.) So the same reality is being described at two levels. That implies that if the classical spacetime has a beginning, then so does the quantum gravity regime. For they are descriptions of the same reality. In the one a singularity is part of the description; in the other it is not. So what is prior to the Planck time is not the quantum gravity era as such; rather what is prior is the classical period of which the quantum gravity description is the more fundamental description. If this is correct, then, given the beginning of the classically described universe, it is impossible for the universe as quantum gravitationally described to be without a beginning. For they just are the same universe at different levels of description.

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Anthony Aguirre and John Kehayias, “Quantum Instability of the Emergent Universe,” arXiv:1306.3232v2 [hep-th] 19 Nov 2013. They are specifically addressing the Ellis-Maarten model, but their point is generalizable.

[\[27\]](#)

Richard Schlegel, “Time and Thermodynamics,” in *The Voices of Time*, ed. J. T. Fraser (London: Penguin, 1968), p. 511.

[\[28\]](#)

Ludwig Boltzmann, *Lectures on Gas Theory*, trans. Stephen G. Brush (Berkeley: University of California Press, 1964), §90 (446-448).

[\[29\]](#)

Beatrice Tinsley, “From Big Bang to Eternity?” *Natural History Magazine*, October 1975, p. 103.

[\[30\]](#)

Duane Dicus *et al.*, “The Future of the Universe,” *Scientific American* (March 1983): 99.

[\[31\]](#)

Tinsley, “Big Bang,” p. 105.

[\[32\]](#)

Paul Davies, “The Big Bang—And Before,” The Thomas Aquinas College Lecture Series, Thomas Aquinas College, Santa Paula, Calif., March 2002.

[\[33\]](#)

Lin Dyson, Matthew Kleban, and Leonard Susskind, “Disturbing Implications of a Cosmological Constant,” <http://arXiv.org/abs/hep-th/0208013v3> (14 November 2002), p. 4. Their point of departure is Henri Poincaré’s argument that in a closed box of randomly moving particles every configuration of particles, no matter how improbable, will eventually recur, given enough time; given infinite time, every configuration will recur infinitely many times. Eschewing a global perspective in favor of a restriction to our causally connected patch of the universe, they argue for the inevitability of cosmological Poincaré recurrences, allowing the process of cosmogony to begin anew. N.B. that even if bubble universes decay before the Poincaré recurrences could happen, there is still enough time for the invasion of Boltzmann brains, discussed below.

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Roger Penrose, “Time-Asymmetry and Quantum Gravity,” in *Quantum Gravity 2*, ed. C. J. Isham, R. Penrose, and D. W. Sciama (Oxford: Clarendon Press, 1981), p. 249; cf. Stephen Hawking and Roger Penrose, *The Nature of Space and Time*, The Isaac Newton Institute Series of Lectures (Princeton, N. J.: Princeton University Press, 1996), pp. 34-5.

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Penrose, “Time-Asymmetry,” p. 249.

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Roger Penrose, *The Road to Reality* (New York: Alfred A. Knopf, 2005), pp. 762-5.

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For literature see Don N. Page, “Return of the Boltzmann Brains,” (15 November 2006), <http://arXiv:hep-th/0611158>.

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Aron C. Wall, "The Generalized Second Law implies a Quantum Singularity Theorem," arXiv: 1010.5513v3 [gr-qc] 24 Jan 2013, p. 38.

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Ibid., p. 4.

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Paul Davies, "The Birth of the Cosmos," in *God, Cosmos, Nature and Creativity*, ed. Jill Gready (Edinburgh: Scottish Academic Press, 1995), pp. 8-9.

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All of these quotations are from Krauss's videos posted on YouTube, including his Asimov Memorial "Nothing Debate" 1:20:25; American Atheists lecture 26:23; Richard Fidler interview; discussion with Richard Dawkins at Arizona State Origins Project 37min.; and Stockholm lecture 46:37.

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David Albert, "On the Origin of Everything," critical notice of *A Universe from Nothing* by Lawrence Krauss, *New York Times Sunday Book Review*, March 23, 2012.

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Alexander Vilenkin to Alan Guth, March 20, 2017. I am grateful to Daniel Came for sharing with me this correspondence, in which Vilenkin strongly rejects Guth's claim of a beginningless universe on the basis of time-reversal models.

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Vilenkin, "The Beginning of the Universe."

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From our debate posted at http://www.reasonablefaith.org/debate-transcript-what-is-the-evidence-for-against-the-existence-of-god#_ftn5; cf. Peter Atkins, *Creation Revisited* (New York: W. H. Freeman, 1992).

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Christopher Isham, "Quantum Cosmology and the Origin of the Universe," lecture presented at the conference "Cosmos and Creation," Cambridge University, 14 July 1994.

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Sean Carroll, "Does the Universe Need God?" in *The Blackwell Companion to Science and Christianity*, ed. J. B. Stump and Alan G. Padgett (Oxford: Wiley-Blackwell, 2012), p. 196.