

Review Article

Square Pegs for Round Holes? Applying Historical Method to Jesus' Resurrection

Stephen Smith¹

1. Independent researcher

It has become the norm for evangelical scholars studying the resurrection of Jesus, notably William Lane Craig and Michael Licona, to argue that the alleged historicity of this event can be made clear via the application of tried and trusted historical methods such as the principles of analogy, antecedent probability, and inference to the best explanation. Bayes' Theorem, although strictly a statistical tool, has also sometimes been deployed to bolster these arguments. In the present article, I argue that each of these methods, not least because the involvement of God as agent, is *ipso facto* beyond the possibility of historical enquiry. Despite the obvious evangelical objections, I suggest that, assuming there was a resurrection 'event' of sorts, the best of the natural explanations, such as the hallucination-cum-collective delusion hypothesis, is as likely to be true as the traditional explanation in historical terms.

Correspondence: papers@team.qeios.com — Qeios will forward to the authors

1. Introduction

Some years ago the evangelical scholar Michael Licona^{[1][2]} published a two-part article affirming that the traditional view of God having raised Jesus from the dead is the most satisfying explanation of the resurrection as it is presented in the New Testament. In this he is joined by a host of others, including William Lane Craig^{[3][4]}, Gary Habermas^[5] and N.T. Wright^[6]. Over the course of his article, Licona considers five criteria which, he feels, evangelical scholars can successfully negotiate in support of their views: the principle of analogy, antecedent probability, theological objections, lack of consensus, and miracle claims in multiple religions. Only the first two of these deal directly with acknowledged historical principles, so for present purposes I will disregard the others. In a later work, however, Licona^[7] applies a version of the principle of inference to the best explanation (IBE) directly to this question, which also

deserves serious consideration. Some IBEers further regard statistical methodology, such as Bayes' Theorem^{[4][7][8]}, or similar^[9] as an adjunct to IBE, so this, too, must be considered.

Evangelical scholars often write with the utmost assurance that the traditional explanation for the resurrection event is the best available, giving short shrift to the phalanx of natural explanations on offer. Wright^[6], for instance, claims that this alone is both a 'sufficient and necessary' explanation, whereas all the latter founder on the fact that, although they may be sufficient to explain *either* the empty tomb (e.g. wrong tomb visited, stolen body, Jesus only *apparently* dead) *or* the resurrection appearances (e.g. hallucinations, collective delusions, 'twin brother' theory), they are insufficient to explain both. Admittedly, Occam's razor fares much better under the traditional view than under any of the alternatives, but this by no means nullifies a multi-faceted hypothesis based on hallucinations (for single appearances)-cum-delusions (for the collective ones).

It will be the contention of this paper that when all the methods under discussion are applied, the resurrection hypothesis (RH) is no more persuasive than as an explanation of the data than some of the natural alternatives, particularly where these can be dovetailed, as in the case of the hallucination (HH) and collective delusion (DH) hypotheses.

2. The Principle of Analogy

The historical principle of analogy, which was applied in a theological context by Ernst Troeltsch^[10] over a century ago, is popularly presented as a comparative tool, to wit: events of the past, however described, are likely to be similar in nature to our present experience. If it is affirmed that miracles (normally regarded as naturally inexplicable events with religious significance) do not occur today, it is likely that they did not occur in the past. Admittedly, this definition sounds disarmingly simple, but the underlying principle remains sound. In resorting to William James's 'white crow' argument (see ^[11]), Licona suggests that in order to conclude that no miracle has ever occurred, we would be required to examine every single claim made throughout history, which would be wholly impracticable. Even to investigate the hundreds of claims documented by Craig Keener^[12] alone would be impossible to achieve, since the necessary data are lacking in most cases.

The question of analogy lies with the individual's perception of the world. If a person believes that miracles do occur today, s/he will have no difficulty with affirming past miracles, including the miracle *par excellence*. The sceptic, naturally, will argue for the contrary.¹ But are these alternatives really on a par

with one another? Clearly, no analogy can be made with Jesus' resurrection – as an event it was unique – so *belief* in this event is all that is possible. As some people believed in Jesus' bodily resurrection in past centuries, so it is today: *that* is the true analogy.

It is more difficult to apply the same judgement to the sceptic's views. In applying our knowledge of the natural world to any event, we are appealing to the evidence as we currently understand it. It is not a case of ignoring the miraculous, but of our applying the modern evidence of the natural world which provides us with our only environment. In the case of the claims of Jesus' bodily resurrection, our natural explanations may not be wholly satisfactory, but are they any less so than the heavily-weighted presuppositional approach that appears to characterise the alternative?

3. Antecedent Probability

The criterion of antecedent probability suggests that the historian must select from the various available explanations for an event the one which appears, on the evidence, to be the most probable. This is illustrated by McCullagh^[13] where he seeks to determine whether King William's death at the hands of Walter Tirel was caused by a stray arrow during a hunting expedition, or was an act of wilful murder. The evidence will bear both alternatives, but most historians plump for the former. When this technique is applied to the miracles of Jesus or to his proposed bodily resurrection, sceptics such as Crossan^{[14][15][16][17]}, opine that it is always preferable to opt for a natural explanation, however tentative, rather than a supernatural one. In other words, they deny the latter at source, leaving the field clear for the former. Since 'dead men do not rise' we must look elsewhere for an explanation of the documentary evidence as it stands.

Naturally, the many Christian scholars who have written on this topic – Craig^[3], Habermas^[5], Keener^[12], Loke^[18], Wright^[6] and, of course, Licona^{[2][7]} – argue that the supernatural option should be taken seriously and not simply be dismissed as a non-option. Licona^[1] writes:

Related to the resurrection of Jesus, the early Christians did not claim that Jesus was raised by natural causes, but that God had raised him. If we knew that God (probably) does not exist, then a miracle would be the least probable explanation. And if we knew that God (probably) exists and (probably) wanted to perform a certain act such as raising Jesus from the dead, then a miracle would be the most probable explanation.

Yes, indeed – but this merely presents a restatement of the problem. How do we break the deadlock? Licona thinks that he may have done so by introducing the spectre of Bayes' Theorem (BT), but as I will show in a moment, this wields a two-edged sword which can be used both for and against the traditional position, according to one's point of view. Naturally, in a world under God's control, the idea of miracle would not only be possible, but the performance thereof highly probable, for if God were to refrain from performing miracles, though having the capacity to do it, there would be no sense in the existence of the concept, and God's omnibenevolence would be brought into question. The believer points out that a genuine miracle must be a rare and extraordinary event, otherwise it would not be worthy of the term.¹ Granted that this is so, however, the development of our scientific knowledge suggests that we live in a universe in which miracles are not only vanishingly rare, but in which the evidence for a God who is able to perform them has all but evaporated.

4. Inference to the Best Explanation

Although the Inference to the Best Explanation (IBE) is a standard historiographical method aimed at establishing the most likely explanation for any alleged historical event, it is Behan McCullagh's^[13] presentation, in particular, that has so seduced evangelical scholars during the past few decades. The pioneer in this regard is William Lane Craig^[4], while Michael Licona^[7] followed suit a few years later. N.T. Wright^[6] also betrays an awareness of the IBE method generally, although he does not cite McCullagh.

McCullagh's^[13] work, despite focusing almost entirely on history, does include a single paragraph on the resurrection: '[The resurrection] hypothesis is of greater explanatory scope and power than other hypotheses which try to account for the relevant evidence, but is less plausible and more *ad hoc* than they are. That is why it is difficult to decide on the evidence whether it should be accepted or rejected.'^[13] Given the author's personal convictions, he shows an exemplary reserve of judgement here. It is not followed by Craig and Licona who wonder why RH cannot be more plausible and *ad hoc* too. Both these scholars apply IBE to the resurrection event in ways that McCullagh himself would hesitate to do.

Now, assuming IBE can legitimately take its place alongside other historiographical methods for interpreting the historical data, such as statistical inference or the principle of analogy, it needs to be established what this method can and cannot achieve. Despite openly religious convictions (^[13]) McCullagh is clear that, whatever IBE infers, it cannot be the objective truth of the event underlying the inference, still less the truth of a miraculous occurrence like the bodily resurrection of Jesus. Even should

a best explanation be established this would not prove it to be historically correct^[13]. The truth could lie with a set of circumstances which, According to the application of IBE, might be much less likely than the one proposed.

A major issue for the historian committed to interpreting the data even-handedly is the ever-present problem of bias which stands as a colossus over all others. In this regard, McCullagh seems to take a curiously ambiguous approach. On the one hand,

interpretations notoriously express the interests and values of the historian, [but if] historical descriptions are at least in part determined by historians' interests and values, that is not a good reason for doubting their truth, no matter how well they seem to be justified. [Yet,] even scrupulous attention to the standards of justification ... may not prevent the most prevalent bias in history, namely the failure as a result of one's commitment to one's presuppositions. Only methodological procedures can save historians, to a large extent, from this. ... This kind of bias is the hardest of all to overcome. ^[13].

McCullagh^[13] outlines his approach in terms of seven conditions, on the basis of which, if they obtain, 'one is rationally justified in believing a [historical] statement to be true'. The conditions are as follows:

- The statement, together with other statements already held to be true, must imply yet other statements describing present, observable data.
- The initial statement, or hypothesis, must be of *greater explanatory scope* than any other incompatible hypothesis about the same subject; that is, it must imply a greater variety of observable statements.
- The hypothesis must be of *greater explanatory power* than any other incompatible hypothesis about the same subject; that is, it must make the observation statements it implies more probable than any other.
- The hypothesis must be *more plausible* than any other incompatible hypothesis about the same subject; that is, it must be implied to some degree by a greater variety of accepted truths than any other, and be implied more strongly than any other.
- The hypothesis must be *less ad hoc* than any other incompatible hypothesis about the same subject; that is, it must include fewer new suppositions about the past which are not already implied ... by existing beliefs.
- It must be *disconfirmed by fewer accepted beliefs* than any other incompatible hypothesis about the same subject; that is, when conjoined with accepted truths, it must imply fewer observation

statements and other statements which are believed to be false.

- It must exceed other incompatible hypotheses about the same subject by so much, in characteristics 2 to 6, that there is little chance of an incompatible hypothesis, after further investigation, soon exceeding it in these respects.

Following Craig's^[4] cue, Licona bases his approach on McCullagh's criteria, streamlining his seven features to five:⁸ scope, power, plausibility, ad hocness and illumination. The last item seems to be a more positive interpretation of McCullagh's 'disconfirmation of accepted beliefs', referring to the extent to which a particular hypothesis can illuminate other areas of the subject under discussion. He then systematically applies these criteria to five separate scholarly discussions of the resurrection, namely, those of Vermes^[17], Goulder^{[19][20][21]}, Lüdemann^{[22][23][24]}, Crossan^{[14][15]} and Craffert^{[25][26][27]}, all of whom depart from the traditionalist norm, analysing the extent to which, in his view, each 'passes' (P) or 'fails' (F) those criteria, and finally comparing their performance with that of RH. It hardly need be said that, for Licona, the latter wins hands down. For what it is worth, I reproduce his final table of conclusions below.

	Scope	Power	Plausibility	Adhocness	Illumination
Vermes	F	F	F	P	--- ⁹
Goulder	P	F	F	F	P
Lüdemann	P	F	F	F	P
Crossan	P	F	F	F	P
Craffert	P	F	F	F	P
Resurrection	P	P	P	P	P

If this is what Licona's 'new historiographical approach' amounts to, in my view there is little sign of the neutrality he is supposed to welcome^[7], as is evidenced by the heavy weighting he applies in favour of RH. It is surely much too simplistic to treat hypotheses in this manner. No doubt in the hands of Lüdemann or Goulder, applying the same method, the results would have turned out very differently. However, let us examine in some detail how Licona handles RH.

As he makes clear, it is quite possible in respect of some of the criteria for certain natural hypotheses to match RH in their potential to explain the available data. A glance at the above table will reveal that, in his view, the hypotheses of Goulder, Lüdemann and Crossan, all incompatible with RH, nevertheless pass the 'scope' and 'illumination' tests. This is not a problem for Licona so long as there are no cases in which RH is awarded an 'F' against a 'P' for one or more of the natural hypotheses. With this in mind, we may proceed:

i) *Explanatory scope*. Licona^[7] argues that RH 'grants Jesus' death by crucifixion and accounts for the experiences and beliefs of the disciples and Paul', although he acknowledges that, in this case, it is matched by the hypotheses of Goulder, Lüdemann and Craffert. Cavin and Colombetti^[28], however, in their critique of Craig's RH, which also applies to Licona's presentation at this point, go much further than this. They assert that, far from having at least as much explanatory scope as any natural hypothesis, including Ludemann's version of the hallucination hypothesis (HH), it actually has *less*. This is due to the quality of the evidence in each case. RH focuses on only two factors, namely the empty tomb and the post-resurrection appearances generally. Other than simply affirming belief in the resurrection of Jesus, it does not explain how this came about. The charge that 'God did it' does not constitute a valid historical explanation.

HH, on the other hand, although *apparently* more limited in scope, in that it applies only to the appearances, does offer a genuine explanation for them, even if it requires the aid of Goulder's delusion hypothesis (DH). The accumulation of hypotheses in this fashion admittedly plays havoc with Occam's razor and renders a complete explanation less likely; but a weak *genuine* explanation, or a partial one, is preferable to a pseudo-explanation or no explanation at all. Naturally, our answer here serves as well for the next IBE criterion, *explanatory power*, since our argument has been that a supernatural raising of a physical body cannot be explained according to our normal criteria, but only affirmed.

ii) *Explanatory power*. Regarding this criterion, Licona admits to a certain 'ambiguity when the nature of the appearances is left undefined'. He suggests that RH succeeds to a greater degree if traditional bodily resurrection, rather than some form of visionary hypothesis, is assumed, adding that the former is in accord with the plain sense of the New Testament narratives. However, certainty on this issue is far from assured. It is true that the accounts in Luke and John deliberately stress the physicality of Jesus' post-resurrection body which, nevertheless, behaves in some unnatural ways too (Luke 24: 30–31; John 20: 19–20, 26). In Matthew's Gospel, which is generally thought to predate these, the manner of the appearances is more ambiguous (Matt. 28: 8–10, 16–20), and not everyone is convinced by them (v. 17).

Again, Paul is ambivalent about the nature of Jesus' resurrected body. As a self-respecting Pharisee (Gal. 2: 14; Phil. 3: 5) he would surely have believed in a physical general resurrection at the eschaton, but the jury is out on whether or not he considered the post-resurrection appearances to be such. Paul himself was prone to visions (2 Cor. 12: 2–4), as were many Jews of his day. He consistently uses the term ὡφθῆναι, 'to appear', non-specifically, both of Jesus' appearance to him (1 Cor. 15: 8), and to the other apostles (1 Cor. 15: 5–7), and never suggests that he regarded them as formally different. Luke leaves us in little doubt that he regarded the Damascus road experience as visionary, because Paul's companions, while apparently sensing something (Acts 9: 7; 22: 9; 26: 14), did not see what he saw, nor hear what he heard. Clearly, Jesus was not there in the flesh. So regardless of whether or not Paul had a clear sense of physical resurrection, as Licona suggests, he is far more vague about his personal encounter with Jesus.

iii) *Plausibility*. Licona admits that the question of plausibility is difficult because it involves contrasting presuppositions. For the believer, the God factor is paramount, for RH depends entirely on his existence for its plausibility. For the atheist or agnostic, RH is highly implausible because, in human experience, a person who has been brain-dead for, say, thirty hours cannot be naturally restored to life. The only alternatives available then are the usual candidates: that Jesus was not dead when removed from the cross and recovered from his ordeal^{[29][30]} or that we are dealing with a case of mistaken identity.¹⁰ Licona^[7] is adamant that historians should bracket their personal worldviews when studying the circumstances of the resurrection and suggests that in doing so there is no *a priori* reason for regarding RH as either plausible or implausible. Yet there does remain a significant distinction: In the case of natural explanations, all the evidence remains historically accessible. If, for instance, a subjective vision hypothesis is proposed to explain the appearances, there is no need to speculate about other-worldly phenomena. To be sure, it is impossible to psychoanalyse characters who lived 2,000 years ago^[31], but we do know that subjective visions or hallucinations are products of the brain and need no assistance from the divine. The theist approach, on the other hand, suggests that the ultimate cause of the resurrection was God, in which case RH becomes sacrosanct, obliging the historian *qua* historian to operate with one hand tied behind his/her back.

In their critique of Craig's treatment of the criterion of plausibility (and again Licona's presentation is applicable), Cavin and Colombetti^[28] turn to the Standard Model (SM) of particle physics, noting that RH, as traditionally conceived, simply does not correspond to our contemporary conception of the universe. According to SM, claims that Jesus could materialise and dematerialise at will are simply not viable. They express the matter as follows:

As a quantum field theory, SM allows natural resurrection, but only as an astronomically improbable statistical fluctuation... In contrast, it forbids distinctively supernatural resurrection by immaterial beings... because it entails that only those things that are physical_{SM} can interact with things that are physical_{SM}... According to SM, consequently, the state of the body of Jesus at the moment of its alleged supernatural resurrection by God was a sole function of its previously physical_{SM} state – that of a corpse in some particular state of postmortem decomposition – and those of its physical_{SM} surroundings. Since God is necessarily immaterial, SM thus entails that the state of the remains of Jesus at each point in time after its [sic] death had nothing to do with God.

On this basis, Licona, Craig and other evangelical scholars are unable to offer a scientifically or historically viable explanation for the behaviour of Jesus' body subsequent to his death.

iv) *Ad hocness*. Here, McCullagh^[13] and Licona^[7] are at odds. The former says: '[RH] is of greater explanatory scope and power than other hypotheses which try to account for the relevant evidence, but it is less plausible and more *ad hoc* than they are'. Licona contests this judgement, suggesting that RH, using its trump card, has a perfectly credible explanation for the post-resurrection appearances of Jesus, albeit a supernatural one. It is true that Lüdemann's hallucination hypothesis (HH), for example, is more *ad hoc* by comparison, because it can only explain one element of the data, namely the appearances to certain members of the early Church, and then only to individuals.¹¹ However, its lack of a comprehensive explanation need not imply that in combination with other, compatible hypotheses (notably DH), it cannot be correct. As previously noted, RH can provide a sufficient explanation only by reference to the divine which is generally considered to be beyond the scope of the historian. As such, RH does not provide a *historical* explanation at all.

As Cavin and Colombetti^[28] note, although Craig (and Licona) reject HH on the basis of the 'less *ad hoc*' criterion, they do so by assuming that they have only to show that RH *in toto* succeeds. In truth, the empty tomb and post-resurrection stories comprise numerous pericopae of diverse character, and the 'less *ad hoc*' criterion must be applied on a one-by-one basis, on a par with HH and other natural theories. For instance, given Peter's probable state of mind in the wake of Jesus' crucifixion and the knowledge that he had denied him in his hour of need, it would hardly be surprising, given what we now know of bereavement hallucinations, if he had had such an experience. In this case alone, therefore, HH could be a more likely explanation (less *ad hoc*) than RH. Each pericope must be judged on its own merits.

In conclusion, even if it could be shown that RH fulfilled the set of IBE criteria more convincingly than any natural alternative hypothesis ($H_2 \rightarrow H_n$), it would not thereby demonstrate that RH itself is significantly more plausible.

v) *Illumination*. Licona alleges that RH meets the illumination criterion with ease, although this view is dependent on a key assumption that, in fairness, he would not have had sufficient space to subject to a full discussion in his book. The assumption is that during his ministry Jesus spoke of himself as a divine figure with a unique relationship to God in much the way that he is presented as doing in the gospels. A good many scholars aver that this image was developed by the early Church, and that Jesus never claimed to be divine. However, if he was suspected of being the Son of God by his entourage, the reason why such a belief took hold may be due to the fact that belief in his resurrection took such firm root. In other words, the resurrection accounts illuminate the reason why Jesus came to be regarded as God's Messiah in his lifetime – a view later disseminated through the gospel accounts. In this case, although RH 'passes' the illumination test, Licona awards all the other hypotheses he considers (barring Vermes) similarly positive results, so there is little by way of advantage here. He simply refers to the illumination factor as a 'bonus' criterion.

5. Bayes' Theorem

Now, as I noted above, Licona tells us that the 'proper way' of settling the question of antecedent probabilities would be by use of Bayes' Theorem (BT). Various evangelical scholars^{[4][32][33][34][35]} have thrown caution to the wind and used some form of this theory to mount a full-blooded defence of the probability of miracles, notably the resurrection hypothesis (RH) over against the range of naturalistic explanations such as Lüdemann's hallucination hypothesis (HH). To his credit, Licona recognises the 'insurmountable difficulties' involved in attempting this and refrains from doing so himself. I do not wish to become embroiled in too much detail here, but it may be as well to explain why the use of BT is futile where biblical scholarship is concerned.

Bayes Theorem is a method of determining the probability of an event by applying new evidence to recalculate the prior probability of an event arrived at by using the prior data alone. In other words, it calculates the extent to which new evidence impacts upon prior knowledge. In its simplest form, it can be stated:

$$P(A | B) = \frac{P(B | A) \times (P | A)}{P(B)}$$

For BT to work effectively, however, it is essential to have access to prior irrefutable data.

For instance, if we wanted to calculate the probability of a serious volcanic eruption of Vesuvius within the next twenty-five years, we would need to feed into our calculation all the relevant data since records began and then apply it to the present data regarding seismic activity in the area. In calculating probabilities of events in the natural world, BT can be very effective; but how far can this be said of attempts to determine the probability of Jesus' bodily resurrection? Clearly, when biblical scholars, evangelical or otherwise, use BT as a means of confirming their personal presuppositions, the method is doomed to go awry, as Craig's^[4] approach aptly demonstrates.

In his book *Reasonable Faith*^[4], Craig applies BT to the concept of miracles, thereby avoiding the historical question, although this does not prevent him from smuggling in the resurrection as an example, using the formula: $\Pr(R|B) = \Pr(R|G \& B) \times \Pr(G|B)$.³ He then assigns a value of 0.5 (odds of ½) to both elements, resulting in $0.5 \times 0.5 = 0.25$ – a ¼ probability for Jesus' resurrection. Craig admits that these values are 'just for the sake of illustration', and God's miracle-working power is assumed in this reduced version of the formula.

Michael Martin^[36] also uses a form of BT, but in his case with the aim of demonstrating the resurrection to be initially improbable. Since, in his view, 'a miracle claim is initially improbable relative to our background knowledge'^[36], he assigns a value of 0.1 to the probability of Jesus' resurrection, and considers any value below 0.5 to be unworthy of rational belief. The use of the term 'rational' in this context seems odd, since there are many instances of events of low initial probability which have turned out in practice to be true and so, with hindsight, worthy of rational belief. However, he does articulate one maxim on which most users of BT seem to agree, namely that 'the lower the initial probability of the Resurrection ..., the stronger the historical evidence must be to bring $P(R|E \& T)$ '⁴ above 0.5 or 50% so that it would be worthy of rational belief'^[36].⁵ This seems reasonable enough, but Craig apparently demurs:

There is a slogan beloved of the free thought sub-culture that "Extraordinary events require extraordinary evidence". What we can now see is that this seemingly commonsensical slogan is, in fact, false as usually understood. In order to establish the occurrence of a highly improbable event, one need not have lots of evidence^[4].

By way of establishing that a highly improbable event does not necessarily require plenty of extraordinary evidence to explain it, Craig illustrates by means of an example from the lottery. If a highly reliable newspaper announces a winning lottery ticket as 7492871, we do not disbelieve the report on the

grounds that the selection of that number is so improbable. Therefore, we should no more disregard reports of miracles simply because they are improbable events than we should disregard the report of a lottery winner by a reputable newspaper. There is one important difference, however: in the case of the lottery, a selection of some kind is inevitable otherwise there can be no lottery at all. Since there are bound to be some winners, if not a jackpot winner, there is no reason to doubt the winning number, however improbable, since that number carries the same odds of being drawn as any other. In the case of Jesus' resurrection, on the other hand, no inevitability was involved. As Tom Wright^[6] states, no-one expected such an event. Furthermore, BT cannot determine what *kind* of event it was. The disciples may have been as faithful and honest in their reporting as the newspaper journalist reporting the identity of the winning lottery ticket, but they could have been mistaken in their interpretation, an eventuality which would have been somewhat more probable than the newspaper's misreporting the number of the winning lottery ticket. The problem is that Craig is not comparing like with like.

A further problem for Craig's approach is his curious argument that several independent witnesses to an event, each of which is unreliable to some degree, can collectively turn out to be much less unreliable in combination. I quote: '... the cumulative power of independent witnesses is such that individually they could be unreliable more than 50% of the time and yet their testimony combine to make an event of apparently enormous improbability quite probable in the light of their testimony'^[4].

Craig asks us to imagine several witnesses to an event, each of which is 99% reliable. The odds of each being wrong about a particular event would thus be 1:100. But what would be the odds of, say, five such witnesses cumulatively manifesting the same degree of unreliability? The answer would be: $0.01 \times 0.01 \times 0.01 \times 0.01 \times 0.01 = 0.0000000001$, or odds of 1:10, 000,000,000 (ten billion). In applying all this to the resurrection, Craig acknowledges the difficulty of establishing the independence of eyewitnesses, given that many of the appearances were collectively perceived, but he suggests Peter, James and Paul as having independent experiences, and we might add Mary Magdalene on the basis of the evidence in John 20: 10–18. Now let us suppose that each of these four witnesses was 50% reliable in his or her own reporting.⁶ Cumulatively, the equation would be: $0.5 \times 0.5 \times 0.5 \times 0.5 = 0.0625$, or odds of 1/16. In other words, they would be eight times less reliable cumulatively than independently – which to my mind seems highly dubious. The nature of the argument becomes clearer still when, rather than considering the reliability of the witnesses, we focus on their unreliability. For if a witness is 50% reliable, s/he must *ipso facto* be 50% unreliable, and if we apply the above figures to the witnesses' unreliability, we find that they are sixteen times less unreliable collectively than individually. On this basis, therefore, it would have to be said that a

single independent witness is simultaneously both much more and much less reliable than a cumulative set of which s/he is a member – which, presumably, is not the answer that Craig is looking for.

It is not Craig alone whose handling of BT seems questionable. The cumulative approach he favours becomes even more extreme in the hands of other evangelicals such as Jake O'Connell^[34] and the McGrews^[33]. O'Connell examines Paul's statement in 1 cor. 15: 3–8 and each of the resurrection pericopae in the Gospels. By awarding odds of 100:1 or 10:1, depending of circumstances, in favour of bodily resurrection (R) against any alternative hypothesis (~R), he eventually arrives at a figure of one quadrillion to one (1,000,000,000,000,000:1) – a figure of virtual certainty for R. The McGrews adopt much the same process, treating each of the women and the disciples as independent witnesses to the bodily resurrection of Jesus, along with Paul, concluding:

... our estimated factors for these pieces of evidence were, respectively, 10^2 [for the women], 10^{39} [for the disciples considered individually], and 10^3 [for Paul]. Sheer multiplication through gives a Bayes factor of 10^{44} , a weight of evidence that would be sufficient to overcome a prior probability (or rather improbability) of 10^{-40} for R and leaves us with a posterior probability in excess of 0.9999.^[33]

In other words, their claim in favour of R as opposed to ~R is just 0.0001 below certain. This highly improbable conclusion even outstrips the figure of 100/103 given by Swinburne^[35] at the conclusion to his own investigation.²

Well, something here does not add up! How is it that, with all this near-certainty in favour of R, scholars such as Michael Martin^[36] (directly) and Richard Carrier^[37] (indirectly) can argue a directly opposite case? One answer is that we must contend with personal presuppositions on both sides of the divide. Most scholars come to the table with a working hypothesis of their own before applying BT; it is almost impossible not to. The basic Bayesian formula, in all its splendour, is well-known, but it is the individual who must supply the numerical values to bring it to life and, especially when applied to the risen Jesus factor, these must always be estimates erring on one side or the other.

Another issue concerns the status of BT. Before applying it to matters of history, especially of the kind under consideration here, we should remember that it is strictly a statistical method and not of itself a historical one. Some scholars argue that historical approaches like IBE 'should be friends' with BT^[8],

while others^{[38][39]} argue for their incompatibility or for the possible bankruptcy of BT (Earman 1992). Either way, the question of $R/\sim R$ is a historical rather than a statistical one.

Finally, and of greatest significance in my view, is that a bodily resurrection – the restoration of a human being who has been brain-dead for some thirty-six hours or so, can only have been enacted by an omnipotent God (Swinburne's view), and where gods begin history must end. BT seems competent enough to deal with everyday matters such as weather forecasts, tracking the behaviour of earthquake and volcanic activity, or enabling doctors to keep on top of diseases, but I doubt the Thomas Bayes (c. 1701–61), ironically a Presbyterian minister, never intended his invention for use in biblical scholarship.

6. Summary and Conclusion

In this article, I have examined Michael Licona's treatment of three widely acknowledged principles for establishing the best interpretation for an historical event. These include the principle of analogy, of antecedent probability^[2], and of inference to the best explanation^[7]. Along the way we also met a version of probability theory, Bayes' Theorem, along with the even more speculative theorising of Gerald Fudge^[9].

Regarding the principle of analogy, contemporary events can be compared only with those past events of which we have any knowledge; most of the far-distant past has been lost to us. Licona has noted, correctly, that the controversial matter of miracles rests entirely on the individual's assessment. If one is convinced, as Keener^[12] is, that miracles occur today, there is no problem with drawing analogies with their occurrence in the past. For the sceptic, however, the opposite is true. And even if miracles in general are open to analogy, the resurrection of Jesus cannot be since, if it occurred, it was a unique event. Alleged miracles generally occur through a human agent – Elijah, Elisha, Jesus, Honi the Circle-Drawer, Apollonius of Tyana, and so on – whereas the resurrection is assumed to have been a direct act of God for which no human mediator was required.

In respect of antecedent probability, the question is which one of several possible explanations is likely to be the most probable. Licona acknowledges that if we restrict the term 'event' to the natural world, it is likely that any proposed natural explanation will be preferable to a supernatural one. If God is brought into the equation, however, the odds change considerably. The proper method of assessing these issues, says Licona, would be by applying BT. However, we noted that BT is highly suspect when applied to the kind of issues in question here, because it allows the individual to feed his/her own prejudices into the

data, thereby emerging with the result desired rather than the most probable explanation. The weaknesses of this approach are, if anything, even more transparent in Fudge's statistical alternative.

Finally, we considered Licona's application of IBE to the gospel accounts of the resurrection of Jesus and found that his claim to neutrality in this regard seems not to have been mirrored in the results, RH passing all five criteria with flying colours, while all five naturalistic rivals were deemed to have failed at least three of the criteria. What results would have emerged from the hands of a sceptic? Michael Martin^[36] provides us with some insight.

In conclusion, I suggest that decisive results in respect of investigations of this sort are extremely limited. In my view, the evangelical approach is founded on belief in God which the investigator attempts to underpin by reference to established historical principles (the cart-before-the-horse approach), sometimes misapplied. History cannot take us beyond the data supplied by the New Testament literature. Belief in a God who can effect such a miracle is a prerequisite to historical investigation.

The chief problem with naturalistic approaches is that the available data are not sufficient to allow selection of any one of them with confidence. My preferred view, for the sake of argument, is that Peter, guilt-ridden after his denial of Jesus (Mark 14: 66–72), may have hallucinated his presence, believed it meant that Jesus was somehow alive, and shared his experiences with his fellow disciples. On the back of this, collective but delusional sightings began. As I have noted in previous articles^{[40][41]}, it is remarkable how quickly and easily such 'sightings' spread under favourable conditions. The Zeitoun episode, in which thousands of witnesses testified to having seen the Virgin Mary on the roof of St. Mary's Church in Zeitoun during a period of three years (1968–71)^{[42][43][44][45][46]}, is an excellent example. Always, in collective delusion cases, there must be an individual to light the blue touchpaper.¹³

A single explanation which can account for all aspects of an event is generally more plausible than one which requires more than one hypothesis. On the other hand, a natural explanation, using recognised historical principles, is always to be preferred to a supernatural one resting on speculation, even when it requires a greater degree of complexity. After all, we live in a complex world in which events are frequently multi-explanatory. The words of W.K. Clifford^[47] are as relevant today as they were almost 150 years ago: 'It is wrong in all cases to believe on insufficient evidence; and where it is presumption to doubt and to investigate, there it is worse than presumption to believe'.

Footnotes

¹ The regularity of miracles in Keener's compendium of cases, numbering hundreds if not thousands, pays short shrift to the more restrictive view.

² Swinburne deploys BT primarily as a argument for theism, but then as an argument that an omnipotent God is able to perform miracles and ultimately bring about the bodily resurrection of Jesus

Endnotes

¹ Even some of those who accept the historical resurrection of Jesus in principle doubt that the principle of analogy can be applied in this case (see ^[48]). On the limitations of historical analogies more generally, see Keulen^[49].

² The regularity of miracles in Keener's compendium of cases, numbering hundreds if not thousands, pays short shrift to the more restrictive view.

³ In plain, if more protracted language, this means: The probability of the resurrection of Jesus, given background factors (such as prior belief in bodily resurrection), equals the probability of the resurrection of Jesus, given the existence of God and background factors. Actually, Craig's formula is more extensive than this and reads, in full: $\Pr(R|B) = [\Pr(G\&B) \times \Pr(G|B)] + [\Pr(R|\text{not-}G\&B) \times \Pr(\text{not-}G|B)]$. However, the additional part of the formula refers simply to the odds of Jesus' resurrection having occurred in the absence of God and background factors, which would be negligible, so Craig simply omits this part of the formula since it would not, in any case, affect the result.

⁴ That is, the probability of the resurrection (R), given the historical evidence (E) and background theories (T).

⁵ Martin avers that even if the evidence for alternative theories is not strong [say, $P(E|\sim R\&T)$ is valued at 0.2], it would still be sufficient to take the value for the probability of the resurrection below the 0.5 threshold and down as far as 0.36 according to his calculations.

⁶ We must overlook the obvious problem of how we might establish degrees of unreliability. To what extent it can be done mathematically, I don't know, but it can hardly be done in practice.

⁷ The alleged sightings of the Virgin Mary on the roof of St. Mary's Church at Zeitoun, Egypt, occurred before thousands of people over a period of some three years (1968–71). Compared with this, admittedly

unusual, example, the brief appearances of Jesus over a much shorter period (Acts 1: 3) would present little difficulty.

⁸ As does McCullagh in a later book^[50].

⁹ Licona leaves the 'illumination' column blank in Vermes's case because he regards his hypothesis to be too ambiguous to shed light on any other relevant data as an illuminating hypothesis is supposed to do.

¹⁰ The view that Jesus had a twin brother who assumed his identity after his death and duped his followers^{[51][52]} is about as *ad hoc* as can be imagined.

¹¹ As hallucinations are neurologically generated, they can only occur to individual percipients, despite a few claims to the contrary^{[53][54][55]}. I fancy the discrepancy is a terminological one, collective hallucinationists usually confusing the term with collective delusions, which *are* possible.

¹² Unfortunately, there is no space here to discuss McCullagh's^[56] highly enlightening discussion on the problem of bias, which includes the question of what kind of biases are to be avoided, which ones may possibly be incorporated into historiography and, in the final analysis, whether it is possible – or even desirable – to avoid bias altogether. His discussion of Ankersmit (^[57], for example), is especially instructive in relation to postmodernism, under whose roof bias may feel most at home.

¹³ The remarkable gullibility of crowds with a common purpose or belief was clearly noted back in the nineteenth century^[58].

References

1. ^a ^b Licona MR, Van de Watt JG (2009). "Historians and Miracles: The Principle of Analogy and Antecedent Probability Considered." *HTS Teologiese Stud [Theological Studies]*. 65(1):1–6.
2. ^a ^b ^c Licona MR (2009). "The Adjudication of Miracles: Rethinking the Criteria of Historicity." *HTS Teologiese Stud [Theological Studies]*. 65(1):1–7.
3. ^a ^b Craig WL (1989). *Assessing the New Testament Evidence for the Historicity of the Resurrection of Jesus*. Lewiston: Edwin Mellen.
4. ^a ^b ^c ^d ^e ^f ^g ^h ⁱ Craig WL (2008). *Reasonable Faith*. 3rd ed. Wheaton, IL: Crossway.
5. ^a ^b Habermas GR (2024). *On the Resurrection: I – Evidences*. Brentwood, Tennessee: BH Academic.
6. ^a ^b ^c ^d ^e Wright NT (2003). *The Resurrection of the Son of God*. London: SPCK.

7. ^a ^b ^c ^d ^e ^f ^g ^h ⁱ Licona MR (2010). *The Historical Resurrection of Jesus: A New Historiographical Approach*. Downers Grove: IVP Academic, and Nottingham: Apollos.
8. ^a ^b Lipton P (2004). *Inference to the Best Explanation*. 2nd ed. London and New York: Routledge.
9. ^a ^b Fudge G (2025). "A Statistical Analysis of the Hallucination Hypothesis Used to Explain the Resurrection of Jesus." *Religions*. 16:519. doi:[10.3390/rel16040519](https://doi.org/10.3390/rel16040519).
10. [^] Troeltsch E (1913). *Über Historische und Dogmatische Methode in der Theologie, Gesammelte Schriften* [On Historical and Dogmatic Method in Theology, Collected Writings]. Tübingen: JCB Mohr.
11. [^] Murphy G, Ballou RO (eds) (1973). *William James on Psychical Research*. Clifton, NJ: Augustus M. Kelley.
12. ^a ^b ^c Keener CS (2011). *Miracles: The Credibility of the New Testament Accounts*. 2 vols. Grand Rapids, MI: Baker Academic.
13. ^a ^b ^c ^d ^e ^f ^g ^h ⁱ McCullagh CB (1984). *Justifying Historical Description*. Cambridge: Cambridge University Press.
14. ^a ^b Crossan JD (1991). *The Historical Jesus: The Life of a Mediterranean Jewish Peasant*. San Francisco: Harper & Row.
15. ^a ^b Crossan JD (1994). *Jesus: A Revolutionary Biography*. San Francisco: Harper.
16. [^] Ehrman BD (2008). *The New Testament: A Historical Introduction to the Early Christian Writings*. 4th ed. New York: Oxford University Press.
17. ^a ^b Vermes G (2008). *The Resurrection*. New York: Doubleday.
18. [^] Loke ATE (2020). *Investigating the Resurrection of Jesus Christ: A Transdisciplinary Approach*. New York: Routledge/Taylor & Francis Group.
19. [^] Goulder MC (1994). "Did Jesus Rise from the Dead?" In Barton SC, Stanton GN (eds), *Resurrection: Essays in Honour of Leslie Houlden*, pp. 58–68. London: SPCK.
20. [^] Goulder MC (1996). "The Baseless Fabric of a Vision." In D'Costa G (ed), *Resurrection Reconsidered*, pp. 48–61. Oxford: Oneworld.
21. [^] Goulder MC (2000). "The Explanatory Power of Conversion Visions." In Copan P, Tacelli RK (eds), *Jesus' Resurrection: Fact or Figment?*, pp. 86–103. Downers Grove: IVP Academic.
22. [^] Lüdemann G (1994). *The Resurrection of Jesus: History, Experience, Theology*. London: SCM.
23. [^] Lüdemann G (1995). *What Really Happened to Jesus*. London: SCM.
24. [^] Lüdemann G (2004). *The Resurrection of Jesus: A Historical Enquiry*. Amherst, NY: Prometheus Books.

25. ^ACraffert PF (1989). "The Origins of the Resurrection Faith: The Challenge of a Social Scientific Approach." *Neotestamentica*. 23(2):331–348.
26. ^ACraffert PF (2002). "'Seeing' a Body into Being: Reflections on Scholarly Interpretations of the Nature of Jesus' Resurrection Body." *Relig Theol*. 9(1):89–107.
27. ^ACraffert PF (2009). "Jesus' Resurrection in a Social Scientific Perspective: Is There Anything New to Be Said?" *J Study Hist Jesus*. 7(1):126–151.
28. ^A^B^CCavin RG, Colombetti CA (2019). "Assessing the Resurrection Hypothesis: Problems with Craig's Inference to the Best Explanation." *Eur J Philos Relig*. 11(2):205–228.
29. ^ADerrett JDM (1982). *The Anastasis: The Resurrection of Jesus as a Historical Event*. Shipston-on-Stour, Warwickshire: P. Drinkwater.
30. ^ALloyd-Davies M, Lloyd-Davies TA (1991). "Resurrection or Resuscitation?" *J R Coll Physicians Lond*. 25(2):167–170.
31. ^ACraig WL (nd). "A Critical Assessment of Gerd Ludemann's Hypothesis." <http://www.leaderu.com/offices/billcraig/docs/visions.html>.
32. ^AGauch HG (2011). "Natural Theology's Case for Jesus' Resurrection: Methodological and Statistical Considerations." *Philos Christi*. 13(2):339–355.
33. ^A^B^CMcGrew T, McGrew L (2009). "The Argument from Miracles: A Cumulative Case for the Resurrection of Jesus of Nazareth." In Craig WL, Moreland JP, *The Blackwell Companion to Natural Theology*, pp. 562–593. Oxford: Wiley–Blackwell.
34. ^A^BO'Connell J (2016). *Jesus' Resurrection and Apparitions: A Bayesian Analysis*. Eugene, OR: Resource Publications.
35. ^A^BSwinburne RC (2003). *The Resurrection of God Incarnate*. Oxford: Oxford University Press.
36. ^A^B^C^D^EMartin M (2005). "The Resurrection as Initially Improbable." In Price RM, Lowder JJ (eds), *Empty Tomb: Jesus Beyond the Grave*, pp. 43–54. Amherst, NY: Prometheus Books.
37. ^ACarrier RC (2012). *Proving History: Bayes's Theorem and the Quest for the Historical Jesus*. Amherst, NY: Prometheus Books.
38. ^ASalmon W (2001). "Explanation and Confirmation: A Bayesian Critique of Inference to the Best Explanation." In Hon G, Rakeover SS (eds), *Explanation: Theoretical Approaches and Applications*, pp. 61–91. Dordrecht: Kluwer.
39. ^ASalmon W (2001). "Reflections of a Bashful Bayesian: A Reply to Peter Lipton." In Hon G, Rakeover SS (eds), *Explanation: Theoretical Approaches and Applications*, pp. 121–36. Dordrecht: Kluwer.

40. [△]Smith SH (2019). "'He Appeared to Peter': Reconsidering the Hallucination Hypothesis." *Neotestamentica*. 53(1):53–78.
41. [△]Smith SH (2023). "Parapsychology, Hallucinations, Collective Delusions, and Jesus' Post-Resurrection Appearances: A Reply to Glenn Siniscalchi." *J Study Hist Jesus*. 21(2):228–53.
42. [△]Johnston F (1980). *When Millions Saw Mary*. Chulmleigh, Devon: Augustine Publishing.
43. [△]Musso VC (2017). "Marian Apparitions in Cultural Contexts: Applying Jungian Depth Psychological Processes to Mass Visions of the Virgin Mary at Zeitoun." *Int J Jungian Stud*. 9(3):183–196.
44. [△]Musso VC (2019). *Marian Apparitions in Cultural Contexts: Applying Jungian Concepts to Mass Visions of the Virgin Mary*. London and New York: Routledge.
45. [△]Nelson C (1973). "The Virgin of Zeitoun." *Worldview*. 16(1):5–11.
46. [△]Zaki P (1978). *Our Lord's Mother Visits Egypt*. Cairo: Coptic Orthodox Church Publications.
47. [△]Clifford WK (1999). *The Ethics of Belief and Other Essays*. New York: Amherst.
48. [△]Sarot M (2014). "The Ultimate Miracle? The Historicity of the Resurrection of Jesus." *HTS Teologiese Studies [Theological Studies]*. 70(1):1–9.
49. [△]Keulen S (2023). "Historical Analogies: Functions, Limitations and the Correct Use of Historical Analogies." *J Appl Hist*. 5(1):111–131.
50. [△]McCullagh CB (2004). *The Logic of History: Putting Postmodernism in Perspective*. London: Routledge.
51. [△]Shapiro L (2016). *The Miracle Myth: Why Belief in the Resurrection and the Supernatural Is Unjustified*. New York: Columbia University Press.
52. [△]Pullman P (2017). *The Good Man Jesus and the Scoundrel Christ*. Edinburgh: Canongate Books.
53. [△]Broad CD (1953). *Religion, Philosophy and Psychical Research*. New York: Harcourt, Brace & Co. Ltd.
54. [△]O'Connell J (2009). "Jesus' Resurrection and Collective Hallucinations." *Tyndale Bull*. 60:69–105.
55. [△]Zusne L, Jones WH (2010). *Anomalistic Psychology: A Study of Magical Thinking*. 2nd edn. New York and London: Psychology Press.
56. [△]McCullagh CB (2000). "Bias in Historical Description, Interpretation, and Explanation." *Hist Theory*. 39(1): 39–66.
57. [△]Ankersmit FR (1994). "The Origins of Postmodernist Historiography." In Topolski J (ed), *Historiography Between Modernism and Postmodernism: Contributions to the Methodology of Historical Research*, pp. 87–117. Amsterdam: Brill.
58. [△]Le Bon G (1896). *The Crowd: Study of the Popular Mind*. London: T. Fisher Unwin.

Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.