

Addendum to “The Argument from Miracles: A Cumulative Case for the Resurrection of Jesus of Nazareth” as of 12/2/2025:

Please see Lydia McGrew, [“The Resurrection, Independence, and Dependence,”](#) for a fuller treatment of the issue of independence among the disciples’ and women’s testimonies. This fuller treatment makes use of research published subsequent to the original publication of the article in 2009 as well as reflections on the maximal data case for the resurrection and its relation to independent evidence. For two other posts by Lydia McGrew on related issues, see [here](#) and [here](#).

Addendum to “The Argument from Miracles: A Cumulative Case for the Resurrection of Jesus of Nazareth” as of 9/14/2025:

We want to make it clear that in this article the phrase “general reliability” is intended to mean “high reliability,” not merely reliability at some extremely broad level of “the gist” which would be compatible with the authors’ embellishing fictionally. In the years since we published this article, we have provided extensive evidence for the high reliability of the Gospels, in books such as *Hidden in Plain View*, *The Mirror or the Mask*, *The Eye of the Beholder*, and *Testimonies to the Truth* and in many lectures online and in person.

We are also forced, sadly, to state that we can no longer endorse the research of Dr. Gary Habermas as showing the nature and extent of scholarly consensus. For many reasons, there is now significant doubt as to whether we correctly understood what his research documents and whether his interpretations of individual scholars are accurate, especially when it comes to more surprising alleged admissions. For example, on p. 18 of this article we stated, depending on our understanding of Habermas at that time, that there is widespread scholarly consensus that the disciples at least testified as they were traditionally taken to have testified about Jesus’ resurrection. It now seems to us *highly doubtful* that a majority of liberal and skeptical scholars would admit this at all.

Fortunately, although we cite Dr. Habermas’s research, our argument does not depend upon it crucially, since we were prepared then, and are even more prepared now, to argue that the Gospel resurrection accounts, in their polymodal details, represent what Jesus’ disciples *claimed to have experienced*. (Please note that this is not the same as assuming as a premise that the Gospel resurrection accounts are true, which would be circular.) The argument depends upon the existence of those detailed claims, regardless of whether liberal scholars are prepared to grant that they made them. We have now published extensive research ourselves supporting that contention. See [here](#) for some discussion of this point.

The Argument from Miracles: A Cumulative Case for the Resurrection of Jesus of Nazareth

Introduction

It is a curiosity of the history of ideas that the argument from miracles is today better known as the object of a famous attack than as a piece of reasoning in its own right. It was not always so. From Paul's defense before Agrippa to the polemics of the orthodox against the deists at the heart of the Enlightenment, the argument from miracles was central to the discussion of the reasonableness of Christian belief, often supplemented by other considerations but rarely omitted by any responsible writer. But in the contemporary literature on the philosophy of religion it is not at all uncommon to find entire works that mention the positive argument from miracles only in passing or ignore it altogether.

Part of the explanation for this dramatic change in emphasis is a shift that has taken place in the conception of philosophy and, in consequence, in the conception of the project of natural theology. What makes an argument distinctively philosophical under the new rubric is that it is substantially *a priori*, relying at most on facts that are common knowledge. This is not to say that such arguments must be crude. The level of technical sophistication required to work through some contemporary versions of the cosmological and teleological arguments is daunting. But their factual premises are not numerous and are often commonplaces that an educated nonspecialist can readily grasp – that something exists, that the universe had a beginning in time, that life as we know it could flourish only in an environment very much like our own, that some things that are not human artifacts have an appearance of having been designed.

Measured by this standard, the argument from miracles is not purely philosophical. Its evaluation requires the patient sifting of a welter of details, the consideration of putatively analogous events, the assessment of the probability or improbability of fraud or muddle or the gradual growth of legend. And this specificity carries through to its conclusion. More than any other argument in the repertoire of natural theology, the argument from miracles confronts us with the scandal of particularity. For unlike any of the other traditional proofs, the argument from miracles purports to establish not merely theism, but Christianity.

The other and perhaps more significant part of the explanation for the relative neglect of the argument from miracles lies in Hume's famous essay, first published in 1748, which sets out with the ambitious goal of providing "the wise and the learned" with an "everlasting check to all kinds of superstitious delusions." In a historical accident as curious as it is unfortunate, Hume's brief, vigorous polemic is now generally included in anthologies as a set piece, isolated from the dialectical context in which it was originally embedded and presented almost as if it had simultaneously inaugurated and ended the discussion of miracles as a serious ground for religious belief. This may be explained partly by Hume's high reputation and partly by the rhetorical elegance of the piece. But the enduring popularity of Hume's essay is no doubt a function of the fact that he is saying what many philosophers want to hear.

It is not the primary purpose of this essay to refute the arguments of Hume; rather, we are concerned to set the principal argument for the truth of Christianity in its proper light. But at the

end we shall return to Hume, both to put his argument in its historical context and to evaluate the significance of the considerations he and his modern progeny have raised against the argument from miracles.

Goal and scope of the argument

At the outset, we need to make it clear what argument we are making and how we propose to do it. The phrase “the argument from miracles” implies that this is an argument *to* some other conclusion, and that conclusion is most naturally understood to be theism (T), the existence of a God at least roughly similar to the one believed in by Jews and Christians.

It is, however, not our purpose to argue that the probability of T is high. Nor do we propose to argue that the probability of Christianity (C) is high. Nor, despite the plural ‘miracles,’ do we propose to discuss more than one putative miracle. We intend to focus on a single claim for a miraculous event – the bodily resurrection of Jesus of Nazareth circa A.D. 33 (R). We shall argue that there is significant positive evidence for R, evidence that cannot be ignored and that must be taken into account in any evaluation of the total evidence for Christianity and for theism.

That the resurrection is positively relevant to theism on ordinary background evidence should be obvious. To state the matter modestly and slightly loosely, the probability that God exists is higher if there is significant independent evidence that Jesus rose from the dead than if there is no such evidence, and this is true because the probability that the resurrection took place is virtually nil if there is no God and higher if there is. On any plausible background assumptions, if Jesus of Nazareth died and then rose again bodily three days later, the probability of T is approximately equal to 1.

The resurrection is also positively relevant to Christianity. On any construal of Christianity worth the name, the assertion that Jesus rose bodily and miraculously from the dead is one of its core assertions. It is fairly easy to see that the probability that Christianity is true is greater given that the resurrection of Jesus occurred than it is otherwise on our present background evidence.

We are not, of course, simply “given” that the resurrection occurred. It is a contingent proposition, and any evidence we bring for it will be less than certain. Our contention is that this evidence, which raises the probability of R, also raises the probability of Christianity and of theism. For most of the facts we shall bring forward – the testimony of the disciples to having seen Christ alive and their willingness to die for this testimony, and the testimony of the women to the empty tomb and to their sight of the resurrected Christ – the resurrection stands in a relation both to the evidence and to Christianity that we shall explain later as “acting as a conduit for” or “channeling” the force of that evidence both to theism and to Christianity. The resurrection can be thought of as standing epistemically between this evidence and these other propositions; the evidential force of the testimonial evidence flows through R to T and C. It is possible to give an interesting and probabilistically precise explanation of this notion of the channeling of evidence (McGrew and McGrew, 2008). In the case of the conversion of Paul, on the other hand, the force of the evidence plausibly has impact upon Christianity even independent of the resurrection; even given that the resurrection occurred, Paul's conversion provides additional evidence for Christianity (for such propositions as that Jesus is in heaven and is God,

for example), since Paul's conversion and the heavenly vision that occasioned it were not simply an attestation to the fact that Christ had risen bodily from the dead. This means that R does not act as a “conduit” of the force of Paul's conversion to C. However, on our ordinary background evidence it is correct to say that Christianity is such a conduit of the force of Paul's conversion to theism – roughly put, that the evidential relevance of Paul's conversion to theism is entirely a function of its impact on the truth of Christianity. In either event, all of the evidence we shall adduce is relevant to theism *by way of* its relevance to more specific or stronger claims – the resurrection and the truth of Christianity. Hence this evidence does indeed support theism, and the argument for the resurrection is indirectly an argument for theism. But it is an argument for theism that goes by way of its direct impact upon richer, more specific claims than the mere claim that God exists.

Even as we focus on the resurrection of Jesus, our aim is limited. To show that the probability of R given all evidence relevant to it is high would require us to examine other evidence bearing on the existence of God, since such other evidence – both positive and negative – is indirectly relevant to the occurrence of the resurrection. Examining every piece of data relevant to R more directly – including, for example, the many issues in textual scholarship and archeology which we shall discuss only briefly – would require many volumes. Our intent, rather, is to examine a small set of salient public facts that strongly support R. The historical facts in question are, we believe, those most pertinent to the argument. Our aim is to show that this evidence, taken cumulatively, provides a strong argument of the sort Richard Swinburne calls “C-inductive” – that is, whether or not $P(R)$ is greater than some specified value such as .5 or .9 given *all* evidence, this evidence itself heavily favors R over $\sim R$.

At a first approximation, our argument is explanatory: The conjunction of the salient facts we shall adduce is well explained by R. But this is an incomplete description, since it does not bring out the contrastive sense of explanation we have in mind. At a second approximation, our argument is comparative: We contend that no alternative hypothesis that is not itself enormously improbable – even on the assumption that the resurrection did not occur – explains the conjunction of the facts in question anywhere nearly as well as R explains them. Finally, our argument gives a probabilistic analysis to the notion of explanation. We argue that, given our background knowledge, the ratio of the probability of all the facts in question given R over the probability of all of those facts given $\sim R$ is extremely top-heavy. This is to say that the disjunction of alternatives to R (all the possible hypotheses that fall under $\sim R$) does not account for the facts in question nearly as well as does R. Formally:

$$\frac{P(F_1 \& \dots \& F_n | R)}{P(F_1 \& \dots \& F_n | \sim R)} \gg 1$$

It follows from this assertion that the set of facts in question is highly confirmatory of R.

The Concept of a Miracle

Philosophical discussions of miracles often involve a detailed examination of different notions of “miracle.” Hume's own discussion features two definitions that are not equivalent: “A violation of a law of nature” and “a transgression of a law of nature by a particular volition of the

Deity, or by the interposition of some invisible agent.” These definitions suffer from various drawbacks, as many subsequent commentators have noted. Some conceptions of natural law would rule out miracles altogether (McKinnon, 1967, pp. 308-14; Earman, 2000, p. 8). On other conceptions, miracles are not violations of the real laws of the universe but merely of those local generalizations which we, in ignorance, are apt to call the laws of nature.¹ On still other conceptions, an event may be truly miraculous although its occurrence is in full accordance with the laws of nature.² In any event, the concept of a miracle makes sense even on an account of nature that predates the notion of natural laws, so long as there is a normal order of nature as a background against which the miraculous stands out (Swinburne, 1989, pp. 2-10, Houston, 1994, chapters 1 and 2). Whether the working of miracles is the prerogative of God alone is itself a disputed point in the history of theology.³

Fortunately, we do not need to offer necessary and sufficient conditions for something’s being a miracle in order to pursue the present line of argument, since our discussion is focused on the resurrection of Jesus, and all parties to the discussion are agreed that the resurrection of Jesus, if in fact it took place, would be a paradigm case of a miracle. For our purposes, it suffices to stipulate that *a miracle is a specific event that would not have happened if only the natural order had been operating*, where the natural order is understood to involve physical entities, their interactions, and the actions and interactions of animals, humans, and beings with powers much like ours. There is some vagueness in this definition, particularly with respect to what “powers much like ours” might amount to; but it has the merit of avoiding semantic questions about what constitutes a physical law and whether a physical law cannot, by definition, be violated.⁴

Textual Assumptions

At the beginning of the first volume of *A Marginal Jew*, John Meier facetiously suggests that the problem of the historical Jesus might be resolved by resort to an “unpapal enclave” in which a Protestant, a Catholic, a Jew, and an agnostic are locked into the Harvard Divinity School library and fed on bread and water until they hammer out “a consensus document on who Jesus of Nazareth was and what he intended in his own time and place.” (Meier, 1991, p. 1) The jest underscores a difficulty we must face at this point. A historical argument of the sort we

¹John Venn (1888, pp. 428f) seems inclined to endorse this sort of position. C. S. Lewis also appeals to it both in his philosophical work and in his fiction; see Lewis (1947, p. 61; Lewis, 1946, pp. 367-68). For a critique, see Wardlaw (1852, pp. 31-41).

²See Larmer (1988, pp. 3-30) and Larmer’s contributions to Larmer (1996).

³For a useful historical discussion, see Burns (1981).

⁴We do not wish to imply that the definition of a miracle as a suspension of physical causation or a violation of physical law is *wrong*; McKinnon’s argument in particular strikes us as mere semantic jugglery. But it is simpler to stipulate that a miracle is an event that would not have happened in the natural order and then to define the natural order as we have done.

propose to lay out must proceed on some assumptions regarding the relevant texts, and at the point where philosophers most naturally enter the discussion, we might hope that the historians and scholars of those particular texts would have arrived already at some consensus regarding their subject matter. Unhappily, this is not the case: the field of New Testament scholarship is riven with disputes among acknowledged experts. We must, therefore, give at least a statement of what we are (and what we are not) taking for granted and a very brief sketch of our reasons.

Our argument will proceed on the assumption that we have a substantially accurate text of the four gospels, Acts, and several of the undisputed Pauline epistles (most significantly Galatians and I Corinthians); that the gospels were written, if not by the authors whose names they now bear, at least by disciples of Jesus or people who knew those disciples – people who knew at first hand the details of his life and teaching or people who spoke with those eyewitnesses – and that the narratives, at least where not explicitly asserting the occurrence of a miracle, deserve as much credence as similarly attested documents would be accorded if they reported strictly secular matters.⁵ Where the texts do assert something miraculous – for example, Jesus' post-resurrection appearances – we take it, given the basic assumption of authenticity, that the narrative represents what someone relatively close to the situation claimed. For the purposes of our argument, we make no assumption of inspiration, much less inerrancy, for these documents, and we accept that there are small textual variations and minor signs of editing, though we do not in any place rely on any passage where the textual evidence leaves serious doubt about the original meaning. Indeed, much of our argument could be made without even the general claim of reliability, since as we shall point out many of the salient facts are agreed upon by scholars across the spectrum. But we have chosen to frame the argument this way since we think the general reliability claim is quite defensible and since this allows us to tackle the philosophically interesting questions regarding evidence for the miraculous on the same plane where Hume leveled his famous attack, prior to the rise of higher criticism of the New Testament texts.

A favorite tactic of the adversaries of Christianity in the eighteenth century, vigorously employed by Hermann Samuel Reimarus in the *Wolfenbüttel Fragments*, is to point to various discrepancies, real or imagined, in the telling of the same story and to conclude that the texts contradict each other and therefore are untrustworthy at best and worthless at worst. The accounts of Peter's denial of Christ in the four gospels differ in various minor details; the resurrection narratives vary in the names of the women they place at the tomb and the details noted there; John reports that Mary Magdalene ran to find the disciples, while Matthew makes no mention of this. Such minor discrepancies have afforded skeptics a pretext for discounting the narratives *tout court*, and some earnest defenders of the gospels have played into their hands by insisting that every detail is reported with minute accuracy, even if this forces one to the conclusion that Peter denied Christ six or twelve times rather than three.

The number of alleged discrepancies in the gospels is greatly exaggerated by a free use of the *argumentum ex silentio*: if an author does not mention some piece of information, it is too

⁵Lest anyone should be tempted to over-interpret this rather minimal statement, we note that it is not our intention to concede as unhistorical texts on which the present argument does not depend.

often assumed that he was unaware of it or even that he positively believed the contrary. Such arguments from silence are pervasive in New Testament scholarship, but they are tenuous at best. By such reasoning we can easily find “contradictions” even in the writings of one and the same historian, as when Josephus mentions facts in his *Antiquities* that we might have expected him to repeat in his *Jewish Wars* (Paley, 1859, p. 337). When we extend it to the comparison of multiple authors who treat of the same subject, the results are ridiculous.⁶ The moral to be drawn is that it is a risky business to speculate upon the motives of authors for including or omitting various facts. To create an appearance of inconsistency by this device, or by such means to justify elaborate hypotheses regarding editors and recensions of the gospels, is methodologically unsound.⁷

Some of the alleged contradictions among the gospel narratives arise from demonstrably uncharitable or uninformed readings of the texts. But with respect to the historical argument, the debate over the resolution of such issues is beside the point. Even a passing acquaintance with the documents that form the basis of secular history reveals that the reports of reliable historians, even of eyewitnesses, always display selection and emphasis and not infrequently contradict each other outright. Yet this fact does not destroy or even significantly undermine their credibility regarding the main events they report. Almost no two authors agree regarding how many troops Xerxes marshaled for his invasion of Greece; but the invasion and its disastrous outcome are not in doubt. Florus’s account of the number of troops at the battle of Pharsalia differs from Caesar’s own account by 150,000 men; but no one doubts that there was such a battle, or that Caesar won it. According to Josephus, the embassy of the Jews to the Emperor Claudius took place in seed time, while Philo places it in harvest time; but that there was such an embassy is uncontroversial. Examples of this kind can be multiplied almost endlessly.

In law, it has long been recognized that minor discrepancies among witnesses do not invalidate their testimony – indeed, that they provide an argument against collusion. The eminent legal scholar Thomas Starkie stresses this point in his discussion of testimonial evidence:

It is here to be observed, that partial variances in the testimony of different witnesses, on minute and collateral points, although they frequently afford the adverse advocate a topic for copious observation, are of little importance, unless they be of too prominent and striking a nature to be ascribed to mere inadvertence, inattention, or defect of memory.

It has been well remarked by a great observer, that “the usual character of human testimony is substantial truth under circumstantial variety.” It so rarely happens that witnesses of the same transaction perfectly and entirely agree in all points connected with

⁶Our principal sources for the life of Tiberius Caesar, for example, are Suetonius, Tacitus, and Dio Cassius. These three authors actually do contradict each other in a number of places. But the number of “contradictions” would be vastly increased if we were to assume that each instance of events mentioned by one but omitted by another counts as a contradiction.

⁷For a thoughtful critique of this device in New Testament scholarship, with special reference to Reginald Fuller’s work on the gospels, see Alston (1997, pp. 148-83).

it, that an entire and complete coincidence in every particular, so far from strengthening their credit, not unfrequently engenders a suspicion of practice and concert.

The real question must always be, whether the points of variance and of discrepancy be of so strong and decisive a nature as to render it impossible, or at least difficult, to attribute them to the ordinary sources of such varieties, inattention or want of memory (Starkie, 1833, pp. 488-89).⁸

The case is no different with respect to the gospels. Granting the most that could be said on behalf of the critic – that a comparison of the gospel accounts reveals real and unresolvable contradictions regarding some subsidiary details of setting or circumstance – it would not follow that they are less reliable than any other historical document regarding the principal facts they relate.

The assumption that the gospels and Acts are basically historically reliable has knowledgeable contemporary advocates.⁹ But it flies in the face of nearly a century of New Testament scholarship based on form criticism and its methodological offshoot, redaction criticism. In brief, these are versions of literary criticism whose adherents have proclaimed the gospels in their present form to be late productions of the Christian community and have attempted to excavate the texts as they have come down to us in order to discover the hypothesized original layers beneath the postulated accretion of oral tradition and legend or to determine the intentions of the last redactor, or editor. The chief requirement for this theory of literary layers is time – time for originals to be gradually edited into a radically different form, time for the development of miracle legends, time for the evolution of John’s high Christology that could be grafted onto a set of original simple parables and sayings of Jesus or for those sayings to be midrashically expanded without the fact’s attracting notice or criticism. It is therefore no accident that the dominant position in New Testament studies since the pioneering *Formgeschichtliche* work of Martin Dibelius and Rudolf Bultmann has been that the gospels are very late productions, preferably well into the second century but in all events after A.D. 70, since any earlier dating would require us to attribute to Jesus prophetic abilities with respect to the destruction of Jerusalem that would run afoul of the philosophical naturalism driving the project.

The role of such naturalism as a motivating factor in the work of the form critics is often explicit, but as an argument against a more traditional position it suffers from the obvious drawback of circularity. Consequently, form critics have typically supported their conclusion of late dating of the gospels and Acts by pointing to ostensible anachronisms and errors of detail that show the authors to have been, not eyewitnesses, but creative and tendentious redactors writing at a substantial remove from the events they are purportedly recording.

Unquestionably, if we examine the gospels with a literary lens of sufficient resolving

⁸The “great observer” quoted by Starkie is William Paley (1859, p. 336). For examples in cases at law, see Starkie’s note (1833, p. 488) and also Simon Greenleaf (1874, pp. 32-36). Starkie is by no means alone among legal scholars in making this observation.

⁹See in particular Craig Blomberg (1987; 2001).

power, we find that they contain material belonging to various literary types: *logia*, parables, pronouncement stories, speeches, and so forth. To recognize this fact is not to make any concession on the point of interest to us here. And anyone who has read much biblical criticism knows that the form and redaction critics often command much real scholarship and sometimes display astonishing imagination. But there are good reasons for dismissing the sweeping negative conclusions of form criticism regarding the authenticity and reliability of the narratives. There are no independent textual traditions preserving the allegedly earliest forms; one must discern them in the existing text, and in many cases the layers are visible only when the text is viewed with eyes of form-critical faith. There is a substantial and growing body of evidence that the gospels were indeed written by eyewitnesses or by those with access to eyewitnesses. And the conjectures of the form critics regarding the dating and accuracy of the New Testament writings have repeatedly been shown by scholars in other fields to be embarrassing blunders.

A few examples may help to illustrate the latter point. In the early 20th century, the French critic Alfred Loisy dismissed the description in the fourth gospel (John 5:2) of the pool of Bethesda as having five porches. This, Loisy said, was a literary alteration or addition designed to represent the five books of the law which Jesus had come to fulfill. On the basis of such reasoning, and in harmony with the late dating advocated in the previous century by the Tübingen scholar Ferdinand Christian Baur, Loisy set the date for the composition of the gospel at some time after A.D. 150. Excavations of the pool of Bethesda in 1956 revealed that it was located where John said it was, bounded on the sides with four colonnades and spanned across the middle by a fifth (Leon-Dufour, 1967, p. 67; Jeremias, 1966, pp. 36-38). As E. M. Blaiklock says, "No further comment is necessary" (Blaiklock, 1983, p. 65).

Archaeology has not been kind to literary criticism of the gospels and Acts. The discovery in Caesarea Maritima in 1961 of an inscription bearing Pilate's name and title, the discovery of a boundary stone of the emperor Claudius bearing the name of Sergius Paulus (cf. Acts 13:7), the very recent discovery of the Pool of Siloam (John 9) from the time of Jesus, and numerous other discoveries indicate a level of accuracy incompatible with the picture of the development of the gospels as an accretion of legend over the course of two or more generations. Our point is not that these discoveries demonstrate the accuracy of all other portions of the gospels; rather, it is the commonsense principle that authors who have been shown to be accurate in matters that we can check against existing independent evidence deserve, within reasonable bounds, the benefit of the doubt when they speak of matters of putative public fact that we cannot at present verify independently. Several such discoveries also indicate that the author of the gospel of John was familiar with Jerusalem prior to its destruction, a point that directly addresses the attempt to place a very late date on the text. (See Shanks, 2005, p. 23.)

The extreme late dating of John's gospel advocated by Loisy had already been undermined by discoveries in another field. The papyrus fragment μ^{52} , which is independently dated by paleographers to the first half of the second century, contains a few sentences of John's gospel. (See Metzger, 1978, pp. 38-39.) Since there is a strong tradition that the fourth gospel was written in Ephesus, and since this is undoubtedly a copy at several removes from the autograph, the discovery of this fragment in a provincial town on the banks of the Nile provides a serious argument for a first-century date of the gospel of John.

Scholars of Roman history have also dismissed the late dating of the New Testament.

Small details that were questioned by members of the Tübingen school, such as the use of *kyrios* as a designation for the emperor in Acts 25:26, have turned out instead to provide evidence for the accuracy of Acts, since numerous papyri subsequently discovered show that this term had been used in Egypt and the East for the reigning emperor since Ptolemaic times, though it became widespread under Nero and later. Adolf Deissmann sums up the matter incisively:

The insignificant detail, questioned by various commentators, who, seated at their writing-tables in Tübingen or Berlin, vainly imagined that they knew the period better than St. Luke, now appears thoroughly credible (Deissmann, 1965, p. 354).

Such examples are not isolated. The critical assault on the book of Acts, in particular, has produced a sufficiently embarrassing track record that form criticism of it can no longer be taken seriously. (See Hengel, 1983 and especially Hemer, 1989.) “For Acts,” as Roman historian A. N. Sherwin-White writes,

the confirmation of historicity is overwhelming. . . . [A]ny attempt to reject its basic historicity even in matters of detail must now appear absurd. Roman historians have long taken it for granted (Sherwin-White, 1963, p. 189).

The confirmation of the historicity of Acts in turn reflects favorably on the authenticity of the gospel of Luke, which is widely acknowledged to have been written earlier than Acts and by the same author.

The results of literary analysis and source criticism are hardly more compelling when applied to the synoptic gospels as a whole. Consider the attempt to sort out, by literary means, the interrelations of the synoptic gospels. A favorite theory of the past century is that Matthew and Luke, where they contain material not found in Mark, owe this material to a source called “Q.” There is no doubt that at least two of the synoptic gospels had sources; Luke explicitly says that he obtained material from earlier sources (Luke 1:2-3), and tradition identifies the source of Mark’s gospel as Peter. But insofar as it is conceived as a document, Q is entirely hypothetical. Notwithstanding the zeal with which some advocates have approached the matter – the world of biblical scholarship is now graced by commentaries on Q, literary analyses of Q, excavations of the literary strata of Q – there is not one scrap of textual evidence for any such document, not a whisper of it in any writing of the early church fathers. Yet Q is one of the pillars of the dominant two-source hypothesis for the development of the synoptics, and speculations regarding its strata provide the votaries of Q with an almost limitless source of new ideas. For example, in both the gospel of Mark and the passages of Matthew and Luke attributed to Q, Jesus repeatedly refers to himself as the Son of Man. The New Testament scholar John Dominic Crossan is convinced, however, that the idea of the suffering and risen Son of Man is a Markan invention (Crossan, 1991, p. 259). How, then, to account for its presence in Q? Crossan has a ready answer: the term did not appear in the original version of Q but was inserted by a later editor (Crossan, 1991, pp. 244-49). “How,” asks a trenchant critic of Crossan, “does one differentiate the older from the later versions of Q? By the fact that these features are absent from the earlier stage – a triumph of circular reasoning!” (Kee, 1995, p. 22)

Alternative theories of the interrelationships of the synoptics and Q proliferate alarmingly: the two-source hypothesis (priority and independence of Mark+Q, then Matthew and Luke dependent on both but independent of each other), the Griesbach hypothesis (priority of Matthew, next Luke, then Mark), the Farrer hypothesis (priority of Mark, next Matthew, then Luke), the Augustinian hypothesis (priority of Matthew, next Mark, then Luke), and even Lukan priority positions like the Jerusalem School hypothesis of Lindsey and Bivin. To make matters worse, most of these theories have several variants or near relations, like Riley's proto-Matthew variant on Griesbach and Koester's proto- and deutero-Mark variant on the two-source hypothesis.

Faced with such a Babel of conflicting voices, what should the interested layman do? Some would doubtless proclaim the whole thing inscrutable. But when we widen the view and see what light can be shed on this matter from outside the field of literary criticism, we encounter a striking and uncontested fact. Virtually every piece of external evidence we have from the first few centuries regarding the authorship and composition of the gospels concurs that Matthew's gospel was the first written, that it was written in the Hebrew language and later translated, and that Mark wrote what he heard from Peter but without regard to the order of events, making sure only that he did not leave anything out. In Papias's account (c. 125) of the testimony of John (d. circa 100), in Irenaeus's account (*Adversus Haereses* 3.1.1, c. 185) which offers even more chronological detail, in the account of Clement of Alexandria (c. 190) in his *Hypotyposes* (this part preserved in Eusebius, though Clement's work itself is now lost), in the account of the tradition given by Clement's immediate successor Origen (with details not found in what Eusebius preserves of Clement), and even in the subscriptions to Arabic and Syriac manuscripts of Matthew, we find consistent corroboration of this account. Here, for example, is the translation of an Arabic subscription to one of the codices:

Here ends the Gospel of the Apostle Matthew. He wrote it in the land of Palestine, by inspiration of the Holy Spirit, in the Hebrew language, eight years after the bodily ascension of Jesus the Messiah into heaven, and in the first year of the Roman Emperor Claudius Caesar. (See Michaelis, 1801, p. 133.)

The point here is not that every one of these claims must be true; the question of whether Matthew first wrote his gospel in Aramaic, for example, is notoriously problematic. But the widespread agreement of early sources on a number of points is remarkable and cannot be brushed aside, particularly since discrepancies among these sources regarding other points strongly suggest that they are not, for the most part, simply copying one another.

To those cynical of excavations of imaginary strata in an imaginary source document, the external evidence looks like a rock in a weary land. And indeed, if we go back to the door of that library at Harvard and listen closely we can hear a few voices insisting that the breadth, consistency and unanimity of the external evidence ought to be taken seriously (notably Robinson, 1976; Gundry, 1982; Wenham, 1992). Yet they are in a minority. This fact is partly due to a fashionable fixation on literary analysis and a downplaying, out of disciplinary insularity, of patristic claims. But there is a second and significant factor at work here. For if we take the account indicated by the external evidence at face value, we shall be essentially forced to

concede two points: (1) the first two gospels were written very early, well before A.D. 70, and (2) they came, either directly (Matthew) or at one remove (Mark, reporting what Peter had said) from independent eyewitnesses who had been Christ's own disciples. That would make it hard for people who want to argue that Mark is high-level myth making, the culmination of multiple recensions of Q. And it does not provide a sufficiently wide window of time for the stories of Jesus' miracles and the resurrection to develop and flower as a myth, not enough removal in time and space from eyewitnesses of the ministry of Jesus who could have contradicted such accounts. It would, moreover, leave those embarrassing predictions by Jesus of the destruction of Jerusalem in place, opening the door to the possibility of real prophecy. At this point, philosophical presuppositions are exerting a palpable pressure on synoptic studies.

The distorting effects of that pressure are often clear to those who look at the field from without. "A classical scholar," E. M. Blaiklock writes,

finds it difficult to be patient with some of the exotic theories of literary criticism which have bedevilled New Testament studies. Classical historians have been a little ironical in recent decades over the calculated scepticism of New Testament scholars who refuse to see what the classicists so naturally see – a record of life in the first century, if no more than that, which must at least be accorded its unique value as historical material. . . . [W]hen critical theory seeks to persuade that liturgical and spiritual needs and aspirations, taking shape from nowhere, and within the lifetime of those who had known the first half of the first century, themselves created a supporting literature, the narratives and sayings which form the gospels, fantasy is propounded which would provoke ridicule in any less confined and introverted sphere of literary criticism (Blaiklock, 1983, pp. 34-35).

In a revealing autobiographical narrative, classics scholar John Rist describes his own growing realization of the extent to which form criticism had distorted the picture of the New Testament. In the wake of Vatican II, he writes, there seemed "no sense of the limitations of such methods, no grasp of how to distinguish between their use and their abuse."

Examination of the early evidence and of the Gospels themselves convinced me that Matthew's Gospel could not depend on Mark's and was more or less equally early (certainly before A.D. 70). . . .

Thus the full range of Christian claims must go back to the very earliest followers of Jesus, and in all probability to Jesus himself. . . . I could no longer delude myself that "real" scholarship told us that we have no evidence that Jesus himself, as well as the earliest generation of his followers, made claims for his divinity. The attempt of the biblical critics to show that such claims grew up (or were fabricated) within the Church seemed to be a tissue of bad argument, unhistorical treatment of the sources and wishful thinking: the wish being to make Christianity acceptable to the conventional "liberal" orthodoxy, with its characteristic bad faith, of the nineteenth and twentieth centuries. The resulting "scholarship" was defective to a degree that would not be acceptable in other philological disciplines (Rist, 1993, p. 100).

Indeed it would not. Outside the field of New Testament studies, form criticism has been tried and found wanting. Classics scholars quickly tired of the game, as H. J. Rose points out:

... [T]he chief weapon of the separatists has always been literary criticism, and of this it is not too much to say that such niggling word-baiting, such microscopic hunting of minute inconsistencies and flaws in logic, has hardly been seen, outside of the Homeric field, since Rymar and John Dennis died (Rose, 1950, pp. 42-43).

Examples of this sort in various other fields are not difficult to find.¹⁰

One of the most interesting developments in recent scholarship is the realization that the gospels, notwithstanding their distinctive emphases, accord closely with the ideals of Greco-Roman history as exhibited in the work of Thucydides, Xenophon, Polybius, Josephus, and Tacitus, particularly in their preference for the testimony of involved eyewitnesses over written records.¹¹ Richard Bauckham argues that we find the literary device of *inclusio* – a standard means of identifying a principal eyewitness source by bracketing the narrative with references to the individual – in three of the gospels, and he gives illustrations of similar use of the *inclusio* by Lucian and Porphyry (Bauckham, 2006, pp. 124-47). “Thus,” writes Bauckham,

contrary to first impressions, with which most Gospels scholars have been content, the Gospels do have their own literary ways of indicating their eyewitness sources. If it be asked why these are not more obvious and explicit in our eyes, we should note that most ancient readers or hearers of these works, unlike scholars of the twentieth and twenty-first centuries, would have expected them to have eyewitness sources, and that those readers or hearers to whom the identity of the eyewitnesses was important would have been alert to the indications the Gospels actually provide (Bauckham, 2006, p. 147).

Finally, the most scandalous miracle story of all, the story of the death, burial, resurrection, and appearances of Jesus, is attested earlier than even the most conservative date for any of the gospels in the early creed embedded in I Corinthians 15:3-7.¹² Virtually all contemporary New Testament scholars acknowledge that these verses contain a pre-Pauline formula that originated with the primitive church. But with this acknowledgment comes the dilemma of accounting for the origins of Christianity. If the earliest Christians, some of whom were eyewitnesses of the life and ministry of Christ, were firmly persuaded that he had indeed

¹⁰See, in particular, the tragicomic venture of the methods of biblical criticism into the legal field in the story of Florence Deeks’s plagiarism lawsuit against H. G. Wells, summarized in Wenham (1992, pp. 253-55).

¹¹The position is outlined by Samuel Byrskog (2002) and defended in considerable detail in Richard Bauckham (2006). See also Allison Trites (2004, pp. 128ff.).

¹²For a survey of the state of the argument regarding this passage, see Craig (2002, pp. 3-37).

risen from the dead and appeared to known and named disciples who were active in the church, then the mythic option is ruled out. The gospels give us fuller and more detailed accounts of the events following Jesus' death. But most of the core facts (at least) were already in wide circulation within a few years of those events.

A great deal more might be said here. We expect that some readers will find our brief sketch more compelling than others, but it would take a different sort of work to fill the argument out more completely. Those who are unpersuaded may note the extent to which their reservations affect the subsequent argument, but even for them it should be of interest to see what can be said for the historical argument from miracles under the assumptions that Hume and the deists shared with the defenders of orthodoxy when they clashed in the great theological battle of the 18th century.

Background Facts: Death and Burial

Before we proceed to the consideration of the salient facts, we need to mention briefly two pieces of information that we shall take for the purpose of this argument as unproblematic background facts. The first is that Jesus did indeed die, more or less as the existing narratives explain; the second is that he was buried in a tomb.

It is now almost universally acknowledged by New Testament scholars that Jesus died on the cross. The swoon theory, which attracted Schleiermacher, is intrinsically highly improbable. The only recorded instance we are aware of where someone survived a Roman crucifixion was the case recorded in Josephus (*Life of Flavius Josephus*, 75). On an errand for Titus Caesar, Josephus sees some of his old acquaintances being crucified; he tells Titus, who orders that they be taken down and have the greatest care taken of them. Two die under the physician's care; one recovers. One skeptic has tried to argue from this passage that there is a 33% probability that any given crucifixion victim, "after a mere beating," would survive more than a day, though in order to carry this optimism over to Jesus he must dismiss John's account of the spear wound as inauthentic (Carrier, 2006, chapter 3).¹³ Needless to say, the relevant reference class is the set of victims of Roman crucifixion who were *not* taken down and given the best available medical treatment. The number of known survivors in this class is precisely zero.

Besides its antecedent improbability, the swoon theory is wholly inadequate to explain the Easter faith of the disciples, which we shall discuss below. The remarks of Strauss – himself no friend to the traditional belief in the resurrection – are sufficiently trenchant to be worth quoting:

It is impossible that a being who had stolen half-dead out of the sepulchre, who crept about weak and ill, wanting medical treatment, who required bandaging, strengthening, and indulgence, and who still at last yielded to his sufferings, could have given to the disciples the impression that he was a Conqueror over death and the grave, the Prince of Life, an impression which lay at the bottom of their future ministry. Such a resuscitation

¹³Compare the assessments of Strauss (1879, pp. 410-11), Paul Maier (1997, pp. 194-96), and Martin Hengel (1977).

could only have weakened the impression he had made upon them in life and in death, at the most could only have given it an elegiac voice, but could by no possibility have changed their sorrow into enthusiasm, have elevated their reverence into worship (Strauss, 1879, p. 412).

Recently, John Dominic Crossan has maintained the radical position that Jesus was not buried in a tomb at all but was rather buried in a common grave or thrown in a pit along with some lime to speed decomposition of the body (Crossan, 1994, pp. 152-58, Crossan, 1998, pp. xxvii, 550-59). He offers no specific evidence in favor of this hypothesis; it is, he admits, a mere extrapolation from a guess as to what was most common.

I keep thinking of all those other thousands of Jews crucified around Jerusalem in that terrible first century from among whom we have found only one skeleton and one nail. I think I know what happened to their bodies, and I have no reason to think Jesus' body did not join them (Crossan, 1996, p. 188).¹⁴

In order to maintain this position, Crossan must dismiss the burial narrative in Mark 15:42-47 as a fabrication; accordingly he does, stressing the incongruity in the description of Joseph of Arimathea (a follower of Jesus vs. a member of the Sanhedrin, who all condemned Jesus) and the absence of a motive for his burying just Jesus rather than all three of the crucifixion victims. Crossan argues that the motive cannot have been either piety or duty, for then he would have buried the thieves as well; he concludes that "Mark created that burial by Joseph of Arimathea in 15:42-47. It contains no pre-Markan tradition." (Crossan, 1998, p. 555) For good measure, Crossan adds that Mark created the story of the women's discovery of the empty tomb.

In company with the majority of New Testament scholars, we find this argument wholly unpersuasive. The very tension Crossan sees in the description of Joseph of Arimathea would count as evidence against his being an invented character. Why, if Mark were embellishing the narrative, would he invent someone who appears nowhere else in his gospel and give him such a pivotal role? If he did, why would he present a description of that character that generated questions? But in any event, it is not terribly hard to find plausible answers to Crossan's questions. Anyone who has ever been a member of a committee understands that sometimes decisions are made by the committee as a body in the absence of some of its members, and those decisions are recorded as unanimous. As for Joseph's motives for burying Jesus, Crossan employs too narrow a set of alternatives when he considers only piety and duty. There is also the reason implicitly given in the text itself: a disciple's love, which would not extend to the thieves. And we do not know in any event whether, had he been so inclined, he would have had either time or the opportunity to bury the others. This is a profoundly inadequate set of reasons to abandon an inconvenient section of a primary source – or, in this case, four primary sources.

It is also insufficient to get rid of the burial, which is a component not only of Mark 15

¹⁴For further discussion of Crossan's creative approach to history, see Craig (1997, pp. 249-71).

but also of the early creed embedded in I Corinthians 15. Here again, Crossan's approach is to ignore the obvious idea that this creed gives us information about the events at the heart of the birth of Christianity and to talk instead in terms of literary categories: narrative patterns, stories (but not as history), mythical hymns, parallelisms (Crossan, 1998, pp. 546-50). Confronted with the undeniable fact that the first Christians grounded their faith on the resurrection, Crossan simply reinterprets the primal proclamation as an existential metaphor: "This is the resurrection, the continuing presence in a continuing community of the past Jesus in a radically new and transcendental mode of present and future existence" (Crossan, 1991, p. 404). At no point does he engage directly with the possibility that this creed is a summary of an actual series of events. One gets the impression that this possibility simply does not occur to him.

These instances are characteristic of Crossan's entire approach, which involves picking and choosing passages to take seriously or to reject, relying almost exclusively on conjectures regarding literary forms and purposes. Such a methodology calls to mind Martin Hengel's blistering indictment of the pattern of so-called critical scholarship:

We know too little to be able to reject in advance what sources say, in a hypercritical attitude which is at the same time hostile to history, without examining them carefully. Today, after more than 200 years of historical-critical work on the New Testament, such an attitude must be termed uncritical and unhistorical. The real danger in the interpretation of Acts (and the Gospels) is no longer an uncritical apologetic but the hypercritical ignorance and arrogance which – often combined with unbridled fantasy – has lost any understanding of living historical reality (Hengel and Schwemer, 1997, pp. 6-7).

The salient facts: W, D, and P

The first set of facts that constitutes evidence for the resurrection is the testimony of putative eyewitnesses to the empty tomb and of these same witnesses (the women who claimed to have found the tomb empty) to post-resurrection appearances of Jesus. We shall consider the testimony of the (male) disciples to post-resurrection appearances separately.

That some women testified that they found Jesus' tomb empty on the Sunday following his crucifixion is difficult to deny as a historical matter. A succinct account of the women's discovery of the empty tomb and of their vision of angels is found in Mark, the shortest and, some scholars believe, the earliest of the gospels (Mark 16:1-8). Similar accounts are repeated in all the other gospels. Mark names the women coming to the tomb and finding it empty as Mary Magdalene, Mary the mother of James, and Salome. Luke names Mary Magdalene, Mary the mother of James, and Joanna and says that there were "other women with them" (Luke 24:1-11). Matthew names Mary Magdalene and "the other Mary" (Matt. 28:1-7) while John mentions only Mary Magdalene (John 20:1-18).

In a survey of recent New Testament scholarship, Gary Habermas has documented the interesting fact that a notable majority (approximately 75%) of scholars writing on the subject during the thirty years from 1975 to 2005 agree that Jesus' tomb was in fact found empty (Habermas, 2006a, p. 292). This includes scholars who are skeptical of Christianity itself. We

shall argue that the testimony of the women to the empty tomb is evidence for R, and so we are obviously taking it that their testimony is evidence that the tomb was indeed empty. But here we are concerned only to note that this large scholarly acceptance of the empty tomb almost certainly represents a scholarly acceptance of the more modest claim that some female witnesses *said* that they found the tomb empty. The only other recorded witnesses to the empty tomb are Peter and John.¹⁵ Two gospels mention Peter's going to the tomb, and one mentions John (Luke 24:12, John 20:3-10). Moreover, in those accounts Peter and John go to the tomb only after and because they have heard from the women a report of the empty tomb. An important part of the evidence that the tomb was in fact empty comes from the report of the women.

That some women claimed to have seen Jesus risen is a slightly more controversial matter, but it is supported by the existing evidence. Mary Magdalene's meeting with Jesus is not mentioned in Mark except in the long ending which is probably spurious, but the account of Mary Magdalene and Jesus is found in John 20:11-18 in some detail, and it ends with her going to the disciples and telling them what has happened. In Matthew 28:9-10 a brief account is given of Jesus' meeting the women who had been to the tomb in a group.

Though some scholars have challenged these accounts as later additions, there are serious reasons to take them to be authentic reports of what the women said. First, the *prima facie* tensions in the narratives of the discovery of the tomb and the first appearances of Christ tell strongly against collusion, copying, and embellishment. One evangelist gives an account of one angel at the tomb, another of two; one has the women setting out "early, while it was yet dark," another sets the scene "when the sun was risen." The lists of the women who are named in the various gospels overlap only partially. Some puzzling details are never worked out for the reader. If Mary Magdalene ran back to tell Peter and John, how did they fail to meet the other women as they returned? What did Jesus mean when he said "Touch me not" to Mary Magdalene? These are the sorts of loose ends and incongruities one would expect from independent eyewitness accounts of the same event, where substantial unity – agreement on the main facts – is accompanied by circumstantial variety.

Second, there is the remarkable fact that in the accounts in Matthew and John where the women are shown as seeing the risen Christ, they are the first witnesses. It is not controversial that in first century Jewish society women were widely considered to be unreliable as witnesses to serious matters. (See Wright, 2003, pp. 607-8.) A few quotations illustrate this point:

But let not the testimony of women be admitted, on account of the levity and boldness of their sex; ... (Josephus, *Antiquities*, 4.8.15).

Any evidence which a woman [gives] is not valid (to offer) ... (Talmud, *Rosh Hashana* 1.8c).

The point should not be overstated, for there are disagreements reported in the Talmud regarding

¹⁵We accept the traditional identification of John the son of Zebedee as "the apostle Jesus loved" and the author of the fourth gospel, largely for the sorts of reasons outlined by Craig Blomberg (2001, pp. 22-41).

the degree of credibility to be granted to the testimony of women.

Wherever the Torah accepts the testimony of one witness, it follows the majority of persons, so that two women against one man is identical with two men against one man. But there are some who declare that wherever a competent witness came first, even a hundred women are regarded as equal to one witness ... but when it is a woman who came first, then two women against one man is like half-and-half (Talmud, b.*Mas. Sotah* 31b).

Nevertheless, it would plainly be better from the standpoint of enhancing the credibility of a contrived story to put a group of respectable males at the tomb and as the first to see the risen Christ than a group of women.

The last important fact concerning the women's reports is that they were not believed. Luke says of the women's report of the empty tomb to the disciples, "And these words appeared to them as nonsense, and they would not believe them" (Luke 24:11). Peter and John did consider it worth going to the tomb to see for themselves, but Luke's account makes it clear that they thought the women unreliable. They continued to be unhappy and (as we shall note later) afraid even after hearing the women's reports. Obviously the story of the angels who said that Jesus was risen made little impression on them, and this not only because of its antecedent improbability. And this attitude to female testimony is scarcely surprising in light of the legal situation we have just described. It is highly plausible that the disciples would have thought the women's story of an empty tomb and angels nonsense, or as the King James Version has it, "idle tales."

Perhaps the most important of the salient facts that, we shall argue, constitutes evidence for the resurrection of Jesus of Nazareth is the testimony, and the circumstances surrounding that testimony, of a number of specific people whose names are known. The later history of the women is largely unknown, but now we turn to the accounts given by specific witnesses who later maintained their witness in the face of clear threat and danger of death, and in some cases to the point of death itself.

As in the case of the testimony of the women, the facts of the testimony and transformation of the disciples are not as controversial as one might expect, even among skeptical scholars. Though we are assuming the authenticity and general historical reliability of the gospel texts and of Acts, the secularly describable facts we are emphasizing are not considered highly dubious among biblical scholars generally. On the contrary, even those unlikely to agree that the gospels (for example) are authentic and generally reliable tend to agree that the disciples testified as they are traditionally taken to have done. In fact, Habermas has documented that a large majority of scholars, including scholars who are not in general theologically conservative, grant that the disciples believed that Jesus had risen from the dead and came to believe this soon after his execution (Habermas, 2005, pp. 151-2, fn. 92, Habermas, 2006a, p. 289, Habermas, 2006b, pp. 79-82).

Eleven disciples – the original twelve minus Judas – said that they had seen Jesus after his resurrection. The names of these eleven are given in Acts 1:13 as Peter, John, James, Andrew, Philip, Thomas, Bartholomew, Matthew, James the son of Alpheus, Simon the Zealot, and Judas the son of James.

To begin with, it appears that these eleven disciples' experiences – characterized by them as seeing and speaking with Jesus risen – occurred in an atmosphere not of expectation or emotional excitement but rather of fear and depression. The fear that the same thing that had happened to Jesus would happen to them is evident even before Jesus' death, in Peter's embarrassing but believable denial during Jesus' trial before the high priest (Mark 14:66-72); and their concern for their own safety continued, according to the account in John, even after Mary Magdalene told them that she had seen Jesus: "...[T]he doors were shut where the disciples were, for fear of the Jews" (John 20:19).¹⁶

But the attitude of some of the disciples, most notably Thomas, was not only one of fear but of open skepticism about the accounts of others. John's account gives the fullest story of Thomas's doubt, including the justly famous demand, "Unless I shall see in His hands the imprint of the nails, and put my finger into the place of the nails, and put my hand into His side, I will not believe" (John 20:25). Matthew's account attributes doubt to some followers of Jesus even upon first seeing him (Matt. 28:17). All accounts agree in portraying the initial attitude of the disciples as anything but expectant of visions or receptive to the idea that Jesus was alive.

The accounts of the eleven's encounters with Jesus are striking in a number of respects, and while in the context of this argument we are not entitled, on pain of circularity, to assume that these accounts are true, we need to get clear in our minds what sort of claim is being made. When we consider the fact that at least thirteen men were willing to die for the claim that Jesus of Nazareth had risen again, it is important to consider what sort of account they gave of what had happened in order to know what it was that they were willing to die for. First, the accounts of Jesus' appearances to the disciples are not vague nor "spiritualized" but rather circumstantial, empirical, and detailed. Not only do they purport to give a number of his statements, discussed below, but they state expressly that he deliberately displayed empirical evidence that he was not a spirit but rather a physical being. It was therefore a physical resurrection claim that the disciples made: "See my hands and my feet, that it is I myself; touch me, and see; for a spirit does not have flesh and bones, as you see that I have." And when they still do not believe, he asks what food is available and eats a piece of fish and a honeycomb. Later he cooks fish for them and invites them to breakfast (Luke 24:39-43; cf. John 20:27; John 21:9-13).

That the disciples were attesting to a physical resurrection is further supported by Peter's allusion in his Pentecost sermon to the decay of David's body in contrast with Christ's body, which did not decay:

Brethren, I may confidently say to you regarding the patriarch David that he both died and was buried, and his tomb is with us to this day. And so, because he was a prophet,...he looked ahead and spoke of the resurrection of the Christ, that he was neither abandoned to Hades, nor did His flesh suffer decay. This Jesus God raised up again, to which we are all

¹⁶Wright (2003, chapter 4, especially pp. 200-06) also argues at some length that Jewish thought at the time would not have led the disciples to predict Jesus' resurrection from their belief that he was a great prophet or even that he was the Messiah. Bodily resurrection at the end of the world in the general resurrection was indeed a feature of Jewish thought, but it was not expected for individuals before that time.

witnesses (Acts 2:29-32).

Second, the personality attributed to a post-resurrection Jesus is not inspiring, kindly, and helpful. On the contrary, he is portrayed as being very much the sort of person he always was, and no more comfortable a companion than ever: Patient but sometimes caustic, commanding and compelling but unnerving and unpredictable, a superb teacher but one not inclined to answer questions he considers impertinent or unnecessary. He responds with an almost word-for-word allusion to Thomas's own demand: "Reach here your finger, and see my hands; and reach here your hand, and put it into my side, and be not unbelieving, but believing" (John 20:27). There is perhaps a touch of amusement in the tone, but the invitation is serious, too. He gives the disciples every opportunity to examine his bona fides but chides them for not believing the testimony of others. He says and does strange things that they are highly unlikely to have understood, such as breathing on them and telling them they now have power to remit sins. He shows himself, talks with them, then goes away again, only to show up again later with what must have been highly frustrating unpredictability. (See, for example, John 21:1-14.) He brusquely dismisses their understandable queries about his Messianic plans now that he is risen (Acts 1:7). So far from soothing their fears and generally dispensing religious uplift, he gives Peter a hard time in the course of verifying his love and faithfulness and then very nearly tells him that he will suffer martyrdom (John 21:15-19). Not only do these accounts indicate that the disciples claimed extensive and direct personal interaction with the risen Jesus, they also manifest a level of realism and vividness of personality that is not consistent with their merely being inspired with a rush of enthusiasm or feeling that they had received vague spiritual "communications" from their master.

Whatever happened to the eleven during the forty-odd days following Jesus' crucifixion, we find a notable difference in their behavior thereafter and an even more striking difference at Pentecost. (See Westcott, 1906, pp. 102-03.) Pursuant, so they apparently said, to the risen Jesus' commands, they waited and spent their time praying in Jerusalem from about forty days after Passover until Pentecost. During that time we also find them electing an apostolic replacement for Judas, namely Matthias (Acts 1:15-26).¹⁷

In passing we should note that the election of Matthias supports Paul's contention (I Corinthians 15:1-8) that Jesus after his resurrection appeared to a larger number of people than the eleven. The account in Acts shows that despite some fairly specific requirements, Peter has his pick among candidates for Judas's replacement:

It is therefore necessary that of the men who have accompanied us all the time that the Lord Jesus went in and out among us – beginning with the baptism of John, until the day that He was taken up from us – one of these should become a witness with us of His resurrection (Acts 1:21-22).

The disciples appoint Matthias and Joseph called Justus to be the finalists, and they draw lots for

¹⁷We shall assume in what follows that when the writer of Acts thereafter refers to "the apostles" as a group he is including Matthias.

Judas's vacant position. Not only does this account give us the name of another putative witness (Joseph), it also can plausibly be taken to imply that there were more to choose from originally who met the requirements (cf. Trites, 2004, p. 137).

Beginning on the day of Pentecost, the (now twelve) apostles engaged in behavior that virtually invited martyrdom, persisting in asserting that Jesus was risen in the face of known danger and explicit and escalating threats. The facts we now recount strongly support the contention that they knew in multiple ways that it was very likely that they would die for their testimony and that they were willing, if necessary, to do so.

First, the commotion they created on the day of Pentecost (Acts 2) was likely to draw them to the attention of the very religious leaders who had connived at and succeeded in bringing about Jesus' death. It had been less than two months since Jesus' crucifixion, and the apostles appeared before a large group of people, deliberately drawing attention to themselves, speaking in multiple languages to the crowds of people gathered in Jerusalem for Pentecost, saying some highly uncomplimentary things about the leaders who plotted Jesus' death, and asserting that he had risen again. Acts states that about three thousand people joined the new movement on that very day, which makes for an eyebrow-raising conjecture as to how many people heard Peter's provocative sermon.

And while they were apparently popular for a while (Acts 2:47), before long they did get in exactly the sort of trouble anyone would have anticipated. After Peter and John were believed to have healed a lame man, and after more public sermons in the temple, they were roughly invited by the temple police to appear before the Jewish rulers – the high priest, the elders and scribes (Acts 4). There they reiterated their assertion that God raised Jesus from the dead. The leaders, used to being the learned elite among the people, were surprised at their boldness (v. 13), recognized them with displeasure as disciples of Jesus, and wanted very much to shut them up. As had happened before in the case of Jesus, they hesitated to do anything drastic immediately because of their popularity with the people. But they threatened them and told them, on pain of non-specified but easily guessed penalties, not to "speak or teach at all in the name of Jesus." Peter and John's reply deserves to be highlighted: "Whether it is right in the sight of God to give heed to you rather than to God, you be the judge. For we cannot stop speaking what we have seen and heard" (Acts 4:18-20). The emphasis on testimony to events directly and empirically witnessed is unmistakable, as is the defiance of threats.

It might be argued that the failure of the leaders immediately to try to have Peter and John executed, and indeed their releasing them for fear of the people, would be taken by the apostles to mean that they could get away with preaching that Jesus was risen, that in fact they did not have to fear death. But exactly the opposite is the case. First, the events of the life of Jesus would have made it clear to them that such "fearing the people" would go only so far. Eventually Jesus' enemies had him arrested by night and, despite his popularity – even greater than the apostles' so far – and his putative miracles – far more numerous than theirs – got the people themselves to demand his death of Pontius Pilate. This was all fresh in the apostles' memories. Second, when Peter and John told the rest of their group what had happened, they immediately prayed at length in terms that showed that they took the threats very seriously indeed (Acts 4:23-30).

The encounters with the Jewish leadership did not stop at one warning. The apostles (it would appear, the whole group of them) were thrown into prison again shortly thereafter for their

defiance by the order of an angered high priest (Acts 5:17-18). Released, ostensibly by supernatural aid, they return immediately to preaching in the temple. Arrested again, though with relative gentleness (“without violence”) by the temple police, brought up before the leaders again, and ordered not to keep preaching as they have been, Peter and the other apostles answer, “We must obey God rather than men” (Acts 5:19) and proceed to reiterate their blame on the leaders for the death of Jesus and their assertion of his resurrection. At this point, the priests “were intending to slay them” (Acts 5:33). Dissuaded for the time being by Gamaliel, they instead beat the apostles and order them *again* to stop preaching, which of course they do not do.

At this point, again, we need to respond to the argument that the apostles may have believed that they would not die because they had been threatened and released several times and that their continued preaching therefore does not indicate a willingness to die for their testimony. Technically, the Jewish people were not permitted by the Romans to exact the death penalty. This was the reason for their bringing Jesus before Pilate and threatening a riot to get Pilate to crucify him. But every indication is that this rule was difficult for the Romans to enforce. More than once, for example, Jesus was very nearly killed by a mob (Luke 4:29; John 10:31). Moreover, the Jewish leaders did apparently have the power of force and a temple police to arrest, the authority to exact the punishment of beatings, and the power to imprison, which hardly would have inspired confidence in the Romans’ ability to prevent their taking matters farther. The leaders obviously thought that they might well be able to kill the apostles, for they began conspiring to do so, and Gamaliel’s dissuasion does not touch on their not having authority from the Romans to kill. It is fairly evident, then, even from the facts given thus far, that death by stoning, instigated by the Jewish leaders, was very much a live possibility and was met with utter defiance by the apostles.

And events proved that this possibility was not merely theoretical. Stephen was stoned after being denounced for blasphemy by witnesses before a religious tribunal and, in response to the charges, preaching a particularly fiery sermon along much the same lines as the preaching of the apostles (Acts 7). The stoning of Stephen appears to have occurred fairly soon after Gamaliel had tried to calm the Jewish leaders and stop the persecution of the apostles (Acts 5:34-39). Dating from the life of Paul, who was present and opposed to Christianity at the time of Stephen’s death, places the event very likely within a year (three years at the most) of Jesus’ crucifixion.

Moreover, there is no evidence that the Romans punished this particular abuse of power on the part of the Jewish leadership. Like all bureaucracies, the Roman government was not always consistent nor inclined to enforce all rules at all times. About a generation later the higher authorities did depose a high priest after the killing of James Jesus’ brother by a Jewish mob (see below), but on the occasion of Stephen’s stoning they appear to have washed their hands of the matter. So far were the Christians from receiving protection from Rome that a widespread anti-Christian persecution, led by Saul of Tarsus, broke out just after the murder of Stephen, and Christians were hauled off to prison or brought before the religious authorities in large numbers (Acts 8).

The epicenter of this persecution was Jerusalem, and the Christians scattered from there carrying their new teachings with them – with the exception of the apostles, who remained at Jerusalem (Acts 8:1). Luke does not say exactly why. Perhaps they thought their refusal to flee

the persecution was important for the strengthening of the new church. Whatever their reason, their willingness to suffer death is here especially clear.

Several of those who claimed to be eyewitnesses of the resurrected Christ undoubtedly did suffer death for their testimony. We shall discuss the three best attested of these martyrdoms below. Other martyrdom accounts come from traditions whose historical reliability is difficult to assess and from documents that include obvious oddities and embellishments. And by all accounts John the apostle was not martyred but died at an old age of natural causes. This is why we are focusing here on the *willingness* of multiple witnesses to suffer death, a fact of great evidential importance in itself. Nor is this simply to say that they changed their manner of life and that they suffered hardships for their beliefs. At this early date the majority of their hardships – the missionary work some of them undertook in distant lands, for example – remained ahead of them. The point rather is simply and starkly that they knew from the beginning that they were likely to die and did not change their story in the face of this probable outcome. For whether they were eventually killed or not, they had their moment of truth at Jerusalem very early on. One account of the death of Andrew's martyrdom as an old man reports that, threatened with crucifixion, he replied, "Had I feared the death of the cross, I should not have preached the majesty and gloriousness of the cross of Christ." Whether this quotation is authentic or not, it brings out the salient fact that Andrew, like the other witnesses, had long before his actual martyrdom faced and persevered in the face of the prospect of a gruesome death.

Two more events point to the same conclusion. Around the year A.D. 41, Herod Agrippa arrested and executed James bar Zebedee, an apostle and a major leader in the church. About the same time he arrested Peter (who was then supposedly released by miraculous intervention), presenting Peter with yet another clear warning of the probable outcome of his course of action. (See Wenham, 1992, pp. 146-7.)

For those Christians who escaped these early Jewish persecutions, a different threat arose some years later. Nero may not have originally been opposed to Christianity. The Romans were inclined at first to regard Christianity as a Jewish sect and the Jews' anger and rioting about it as evidence of an internecine religious squabble. (See, e.g., Acts 18:14-15.) Paul, after his conversion, was indeed protected by the Romans from the Jews, though this may have been in no small measure because he was a Roman citizen and also because he had used his right as a citizen to appeal to Caesar (Acts 23). It is even possible that Nero is responsible for releasing Paul from his first Roman imprisonment, though this idea remains conjectural (Maier, 1997, pp. 329-30). But in 64, all of that changed. In a well-known series of events, Nero chose to distract attention from rumors that he was responsible for the burning of Rome by instituting a fierce persecution of the Christians. After this point, any apostles who remained within the sphere of Roman government, including especially Peter and John, had to consider very seriously the possibility that they would be executed by the Romans.

It appears that what Nero instituted at this time was a local persecution. Nonetheless, anyone who was not a Roman citizen was liable thereafter to arrest and execution by the Romans on the charge of being a Christian. A formal law against Christianity was not required for this outcome, as magistrates had a great deal of latitude in their treatment of non-citizens. By this time, Christianity was regarded with suspicion by the Roman authorities – religious conservatives in their own way – as a "superstition," or, as we would now say, a cult. Now that it

was known that it was not merely an offshoot of Judaism, it was considered a distraction from the traditional worship of the Roman gods and not covered by the exception made for Judaism. And for persistence in such a cult, one could indeed be sentenced to death, as many were. In the famous letter of Pliny the Younger to Trajan, c. A.D. 113, Pliny says that he sentenced non-citizens to death merely for their stubbornness in continuing to assert that they were Christians in the face of his threats. They could, however, be pardoned if they renounced their Christianity, sacrificed to the Roman gods, and cursed Jesus. Trajan praises Pliny's procedure in his reply. While this exchange occurs later than both the Neronian persecution and the deaths of the apostles, such powers for magistrates were almost certainly available earlier; the procedure of pardon in return for apostasy may even have been previously used in the case of people who said that they were no longer Christians (Barnes, 1968, pp. 36-37). We can say then with confidence that after A.D. 64 the remaining apostles had another source, the Roman government, from which they could expect death in some highly unpleasant form or another for their continued adherence to their story.

And some did die for their testimony, one way or another. One of the best attested of these is James bar Zebedee, whom we have already mentioned. His death was apparently the first martyrdom of an apostle. It is documented in Acts 12 and is not in any real historical doubt. The author of Acts gives few details, saying only that Herod "had James the brother of John put to death with a sword." Whether James expected specifically to be executed by Herod, who evidently did so in an attempt to please the Jewish leaders, it is hard to say, but the documentation already given shows that martyrdom at that point in history would not have come as a surprise to any of the apostles.

Chronologically, the next of the best-documented martyrdoms is that of the other James, not an apostle but one who evidently claimed to have seen the resurrected Jesus, James the Just, often listed as Jesus' brother. He is our thirteenth witness, and his conversion appears to have been individual and independent of the experiences of the twelve apostles. Evidence from the gospels indicates that he was not a follower of Jesus during his lifetime and indeed deplored Jesus' embarrassing the family by going about preaching and healing (Mark 3:21, 31; cf. John 8:5). But by Acts 12:17 (c. A.D. 41), and even more clearly in Acts 15 (the Jerusalem Council, probably c. A.D. 49), James was an important leader in the new church. Paul provides an explanation in his listing of those who saw Jesus after his resurrection: "Then he appeared to James, then to all the apostles..." (I Cor. 15:5). This looks as though it is being listed as an individual appearance, and the accounts of Jesus' earliest appearances to those who were already his disciples seem to indicate that at least in several cases there were no "outsiders" present. James seems to have come forward as a convert to his brother's cause on the basis of an experience of his own.

An early account (c. A.D. 93) of James's death is found in Josephus, who says that he was killed by stoning (*Antiquities* 20.9.1). Josephus agrees in large measure with the later church historian Hegesippus, who wrote in the mid-second century. Both date the event quite precisely by the death of Festus as governor of Judea, which puts it at A.D. 62. Both agree that it took place during a window of opportunity while the newly appointed governor, Albinus, had not yet arrived to take up control of the region. Hegesippus's account is more detailed and makes James's death not precisely one by stoning. According to Hegesippus, James retained enormous

prestige among the non-Christian Jews, largely because of his ascetic practices and many hours in prayer. He was widely known as “the Just,” and his witness that Jesus was the Savior was resulting in the conversion of many of the Jewish rulers to Christianity. When the death of Festus left the province momentarily without a present Roman governor, the Jewish leaders decided to do something about it:

So they assembled and said to James: “We call on you to restrain the people, since they have gone astray after Jesus, believing him to be the Christ. We call on you to persuade all who come for the Passover concerning Jesus, since all of us trust you. We and the entire populace can vouch for the fact that you are righteous and take no one at face value....So stand on the parapet of the temple, where you can be clearly seen...” So the scribes and Pharisees made James stand on the temple parapet, and they shouted to him, “O righteous one, whom we all ought to believe, since the people are going astray after Jesus who was crucified, tell us, what does ‘the door of Jesus’ mean?” He replied with a loud voice, “Why do you ask me about the Son of Man? He is sitting in heaven at the right hand of the Great Power, and he will come on the clouds of heaven.”...Then the scribes and Pharisees said to each other, “We made a bad mistake in providing such testimony to Jesus, but let us go up and throw him down so that they will be afraid and not believe him.”...So they went up and threw down the righteous one. Then they said to each other, “Let us stone James the Just,” and they began to stone him, since the fall had not killed him....Then one of them, a laundryman, took the club that he used to beat out clothes and hit the Just on the head. Such was his martyrdom... (Quoted in Eusebius 2.23, Maier, 1999, pp. 81-83).

The combination of flattery and threat here deserves special notice. It seems quite clear that, if this account is substantially correct, the Jewish leaders hoped to strike a blow against the entire Christian sect by getting so prestigious a leader to recant publically. Placing him on a high point from which he could be thrown down was an obvious attempt at coercion, and James must have known what his fate would be if he did not give the desired answer. In Josephus’s account, Ananus, the high priest, “delivered” James up to be stoned. The two accounts are compatible in outline, especially since a recantation from James would have been even more useful in squelching Christianity than his being stoned as an example. It may be that Ananus delivered him to his fellow Jewish leaders and that they made a last attempt to wring from him a public renunciation of Jesus in return for his life. While this theory would contradict what appears to be the implication in Hegisippus that the scribes and Pharisees were ad libbing the scene, Josephus is more likely to be correct about the involvement of Ananus the high priest. According to Josephus, Ananus was subsequently removed from his high priestly position for exceeding his authority by convening the Sanhedrin (which condemned James to death) without permission.

Peter’s martyrdom, too, has reliable warrant, though its details – for example, the mode of execution – are not so well-documented as those of the previous two witnesses. Clement of Rome, writing no later than c. A.D. 96, refers to Peter’s and Paul’s “contending unto death” and making their “testimony” (*μαρτυρήσας*, sometimes translated “witness” or even “martyrdom”) for the faith (I Clement chapters 5 and 6). He uses their examples in a discussion of heroes of the

faith, rather like that in Hebrews 11, to encourage his hearers to be similarly patient and steadfast in the face of suffering and death. Further support for Peter's martyrdom comes from the mid-second-century writer Gaius, who says that the monuments or "trophies" of the apostles Peter and Paul are to be found at the Vatican and on the Ostian Way, respectively. These are the traditional sites of the martyrdoms of Peter and Paul, and Gaius's statement shows that monuments to their deaths were found in these locations from ancient times. Nero's gardens and hippodrome, where Christians were tortured and killed during the Neronian persecution, were indeed located in the Vatican Valley across the Tiber (Maier, 1997, p. 335).

The last of the salient facts we shall touch on here is the conversion of Paul. Neither Paul's historicity nor the fact of his sudden conversion is in serious doubt by most historians, including those skeptical of Christianity itself (Habermas, 2005, pp., 142-3, 151-2, Habermas, 2006, pp. 289-91). The details of Paul's conversion, combined with what he believed thereafter, provide evidence for Christianity and for the resurrection. Here, briefly, are the non-miraculous facts to be explained: Saul of Tarsus, known later as a Christian as Paul, had studied under Gamaliel, who counseled that the apostles be left alone. Unlike his mentor, however, Saul was a fanatical persecutor of the new sect of Christianity. How long his persecution went on after the stoning of Stephen is not known exactly, though by the reasoning discussed above it was most probably less than a year. On a journey to Damascus to arrest followers of Jesus, Saul had some overwhelming experience that left him temporarily blind. He stayed for several days alone, fasting, in Damascus when he arrived there, after which he had a visitor named Ananias, a member of the very group he had been coming to persecute. Saul regained his sight, received baptism by which he identified himself with the followers of Jesus, and immediately began disputing in the Damascus synagogues in favor of the beliefs of the Christians (Acts 9).

Paul apparently gave as an explanation of his dramatic change of heart the well-known account of an auditory and visual experience on the Damascus road. He said that he saw a bright light, saw Jesus (I Cor. 15:8), and spoke with him. Jesus, Paul said, asked him why he was persecuting him and then told him to go to Damascus and await further instructions. The account in Acts also says that this vision had some intersubjective aspects in that Saul's companions heard a voice but saw no one, but we shall not place weight on the experience of the companions.

Paul's message after his conversion is also unmistakable, and we have many of his letters in which he gives an enormous amount of theological teaching. But the elementary creed of I Corinthians 15 summarizes his new beliefs:

For I delivered to you as of first importance what I also received, that Christ died for our sins according to the Scriptures, and that he was buried, and that he was raised on the third day according to the Scriptures, and that he appeared to Cephas, then to the twelve...and last of all, as it were to one untimely born, he appeared to me also (I Cor. 15:3-8).¹⁸

Paul's new beliefs also had a strongly Judaic element. He was particularly concerned to argue

¹⁸Habermas (2005, pp. 142-3) documents the wide critical acceptance of the early date of this confession of Paul's and the historical significance of that fact.

that Jesus was the Messiah whose coming had been prophesied long ago, and he disputed this point with his fellow Jews at every opportunity (e.g., Acts 9:22, 13:16ff).

When, then, Paul said that he saw Jesus and spoke with him on the Damascus Road, he was saying that he saw the person who was the Messiah, who had died, and who was risen from the dead. According to the apostles' own account, by the time of Paul's conversion, Jesus had already ascended into heaven and was not physically present on earth. This would seem to indicate that in some sense Paul was saying that he saw Jesus "in heaven" rather than, as the other disciples did, on earth. Nonetheless, there is no question that Paul regarded himself as having seen *the one* who was risen from the dead. If his experiences were veridical, they were experiences in which he saw the Jesus preached by Peter and the other apostles – that is, Jesus who had died and risen from the dead.

Probabilistic cumulative case arguments: Nature and structure

"The evidence of any complex argument," George Campbell observes, "depends very much on the order into which the material circumstances are digested, and the manner in which they are displayed" (Campbell, 1839, p. iii). Cumulative case arguments are indeed particularly difficult to evaluate, and before we proceed to show in probabilistic terms the force of the facts just adduced, we need to discuss such arguments in general and to show the form that ours will take.

In the nature of the case, such arguments draw on many details and often require, for their full appreciation, more than a passing acquaintance with multiple disciplines. Beyond this, there is the sheer cognitive difficulty of appreciating the evidential impact of multiple pieces of evidence on a single point; we are apt to focus on two or three considerations and discount the rest. Finally, the pieces of evidence must themselves be not only considered in isolation but coordinated, that is, considered in connection with each other. This coordination requires good judgment.

Though it does not resolve all of these problems, a Bayesian framework enables us to approach each of them in a principled way. It enables us to identify and incorporate as wide a set of relevant facts as possible. It provides a means for representing the significance of the facts taken singly and of viewing their coordinated force under the simplifying assumption of independence. And it gives us guidance regarding the evaluation of the argument when that simplifying assumption fails. The argument developed here illustrates each of these features.

To begin to understand how a cumulative case works, we need to find a convenient way to express the significance of a particular piece of evidence with respect to a particular hypothesis. In the present case, the hypothesis in question is

R: Jesus of Nazareth rose miraculously from the dead.

Considering any fact F that is pertinent (positively or negatively) to R, we want to ask two questions: how probable is F, on the hypothesis that R is true? And how probable is F, on the hypothesis that R is false? The answers to these two questions can be expressed as conditional probabilities, and it turns out to be most convenient for us to consider their ratio:

$$\frac{P(F|R)}{P(F|\sim R)}$$

Assuming that both the numerator and the denominator are defined and non-zero, this fraction, sometimes called a Bayes factor, can take any real value from zero upward without bound. If the conditional probabilities in question are interval-valued, we can take upper and lower bounds on the possible values of the fraction.

In a Bayesian analysis, the use of a Bayes factor provides a particularly convenient method for representing the significance of a particular fact F for R . It is a simple consequence of Bayes's Theorem that, where all of the relevant terms are defined and the denominators are non-zero,

$$\frac{P(R|F)}{P(\sim R|F)} = \frac{P(R)}{P(\sim R)} \times \frac{P(F|R)}{P(F|\sim R)}$$

Put in words, this says that the posterior odds on R (that is, the ratio of the posterior probability of R to the posterior probability of its negation) equal the product of the prior odds and the Bayes factor. A little more colloquially, R becomes more plausible when we take into account a fact F that is more to be expected if R is true than if R is false.

The foregoing representation accounts for a single fact. If we take the odds form of Bayes's Theorem for facts F_1, F_2, \dots, F_n , under the assumption of independence, we obtain the following equation:

$$\frac{P(R|F_1 \& \dots \& F_n)}{P(\sim R|F_1 \& \dots \& F_n)} = \frac{P(R)}{P(\sim R)} \times \frac{P(F_1|R)}{P(F_1|\sim R)} \times \dots \times \frac{P(F_n|R)}{P(F_n|\sim R)}$$

Verbally, this says that the ratio of the posterior probabilities is equal to the product of the ratio of their priors with the product of the Bayes factors for each of the independent pieces of evidence. It is in the product of those Bayes factors that the cumulative force of the evidence of the set of facts $F_1 \& \dots \& F_n$ can be seen. If each factor is somewhat top-heavy, the cumulative force of a significant number of these factors will be enormous.

The foregoing equation holds only under the simplifying assumption that each fact, *modulo* both R and $\sim R$, is probabilistically independent of all of the other facts. This assumption simplifies the math, and in some cases it is warranted. But where it is not, a more general formula is available.¹⁹

If R gains a high degree of confirmation from all of the facts in question under the independence assumption, and if we can show that the independence assumption does not exaggerate the impact of the cumulative case in favor of R , it may be most useful simply to calculate the effect of the facts under the assumption of independence and then to show that

¹⁹
$$\frac{P(R|F_1 \& \dots \& F_n)}{P(\sim R|F_1 \& \dots \& F_n)} = \frac{P(R)}{P(\sim R)} \times \frac{P(F_1|R)}{P(F_1|\sim R)} \times \frac{P(F_2|R \& F_1)}{P(F_2|\sim R \& F_1)} \times \dots \times \frac{P(F_n|R \& F_1 \& \dots \& F_{n-1})}{P(F_n|\sim R \& F_1 \& \dots \& F_{n-1})}$$

taking into account dependence among the facts in question can only make the case yet stronger. We shall return to this matter later when discussing a part of the argument where it is plausible that independence does fail.

The fact that mathematics is being employed here may give the impression that what is going on is rather arcane. In fact, the mathematics is simply a means of making explicit a common process of reasoning described well by Butler.

[T]he truth of our religion, like the truth of common matters, is to be judged of by all the evidence taken together. And unless the whole series of things which may be alleged in this argument, and every particular thing in it, can reasonably be supposed to have been by accident (for here the stress of the argument for Christianity lies); then is the truth of it proved: in like manner as if in any common case numerous events acknowledged were to be alleged in proof of any other event disputed; the truth of the disputed event would be proved, not only if any one of the acknowledged ones did of itself clearly imply it, but though no one of them singly did so if the whole of the acknowledged events taken together could not in reason be supposed to have happened unless the disputed one were true (Butler, 1890, p. 261).

Butler's use of "proved" here is the old sense that pertains to probable proofs, but his reasoning is sound. If the facts can be readily accounted for on the supposition of R but not, without great implausibility, on the assumption of $\sim R$, then they provide significant evidence in favor of R .

In understanding Butler's comment, we must be on guard against a plausible error. It might seem that our analysis of cumulative case arguments in terms of Bayes factors puts the emphasis on likelihoods in such a way that finding any sub-hypothesis under $\sim R$ that gives a high probability to some piece of evidence always represents a significant gain for the proponent of $\sim R$ in answering the case for R . But when an auxiliary hypothesis H_a is very improbable given $\sim R$, its contribution to the explanation of a fact F is negligible even when it has high likelihood. Suppose, for example, that H_a actually guarantees F , given $\sim R$ (so $P(F|\sim R \ \& \ H_a) = 1$) but H_a is itself very far-fetched assuming $\sim R$ (say, $P(H_a|\sim R) = .000001$). It is easy to show that H will make only a very small absolute difference to the average likelihood $P(F|\sim R)$, which is the likelihood of interest in the Bayes factor. All that these conditions tell us is that $P(F|\sim R) \geq .000001$. If $P(F|R)$ is on the order of $P(H_a|\sim R)$, that small effect may be evidentially significant. But if $P(F|R) \gg P(H_a|\sim R)$, then the mere fact that $P(F|\sim R \ \& \ H_a) = 1$ does not make a significant difference to the Bayes factor. Supplementing $\sim R$ with a wildly implausible auxiliary hypothesis H_a in order to account for F is a hopeless strategy when R gives even a moderately high probability to F .

It is easy, also, to slip into a different false assumption – that in making a probabilistic argument of the sort in question for R , we are obliged to restrict ourselves to those sub-hypotheses under $\sim R$ that make some attempt to explain the facts in question. We shall, for example, be discussing theories like hallucination, conspiracy, and the wrong tomb in seeing how skeptics might try to account for various bits of the evidence with which we are presented. Naturally, responding to theories of this sort will take up much of our time in defending R . But it does not follow that such would-be-explanatory sub-hypotheses represent most of the probability

space under $\sim R$. In point of fact, if we are talking about what would be expected given $\sim R$, the largest part of the probability space on that assumption must be assigned to the expectation that nothing special would happen at all after Jesus' death – no hallucinations by his disciples, no visions, no conspiracies – but rather that things would just go on in some perfectly ordinary way. The skeptic will of course insist that $\sim R$ has a much higher prior probability than R , and we shall be discussing the question of prior probabilities later on. But by the same token, the negation of all of the facts in evidence has a much higher prior probability than those facts themselves. It is true that many people die and do not rise. And furthermore, many people die, and no one believes that they have risen or has any reason whatsoever to believe it. If we repeatedly say that various would-be-explanatory hypotheses under $\sim R$ have poor prior probabilities, the reader may wonder what hypothesis then is dominating the $\sim R$ probability space. The answer is that most of it is going to the generic hypothesis that Jesus died and that all went on as usual thereafter, which provides *no* explanation, not even an attempted explanation, of the evidential facts in question. This fact results in a very high cumulative Bayes factor favoring R .

When we move from general considerations regarding the epistemology of cumulative case arguments to the salient facts noted above, it is useful first to consider the significance of each piece of evidence independently and then model the cumulative argument under the assumption of independence. Let W , D and P respectively stand for the reports of the women regarding the empty tomb and the risen Christ, the testimony of the disciples, and the conversion of Paul. Then as a first approximation we can combine the evidence in the following fashion:

$$\frac{P(R|F_1 \& \dots \& F_n)}{P(\sim R|F_1 \& \dots \& F_n)} = \frac{P(R)}{P(\sim R)} \times \frac{P(W|R)}{P(W|\sim R)} \times \frac{P(D|R)}{P(D|\sim R)} \times \frac{P(P|R)}{P(P|\sim R)}$$

The product of the last three terms – the respective Bayes factors for W , D , and P – will give the impact of these pieces of evidence on the odds under the assumption of independence.

The Testimony of the Women: Bayes factor analysis

There is no difficulty accounting for W if the resurrection had in fact occurred. The bewilderment of the women, Mary Magdalene's frantic rush to tell the disciples, and even the discrepancies of detail in their several accounts taken together with their agreement on the central fact all fall into place very neatly on the supposition of R .

We therefore need to ask what could plausibly have prompted such reports if Jesus had not been raised from the dead. At the outset we may dismiss the suggestion that the whole thing was due to mere bewilderment or confusion. An empty tomb and a beloved rabbi are objects readily accessible to the senses. We can also set aside the suggestion that the women invented the tale, since it has a prohibitively low prior probability. Because they were women, they could not plausibly have formulated a plan to spread something they knew was a falsehood, for they would have known that in Jewish society their word would be questioned or dismissed, as in fact it was even by other followers of Jesus (Luke 24:11, 22). Means and motive for a deliberate fabrication are both absent. This supposition is a non-starter.

Hallucination hypotheses do not fare much better. Because the women had no expectation

of a resurrection – their entire purpose in the early morning expedition was to anoint the dead body – there were no preconditions that would render a hallucination probable. Luke, who seems to have interviewed some of the women themselves, reports that they were perplexed to find the tomb empty (Luke 24:4). This is borne out by the striking fact that Mary Magdalene did not recognize Jesus at first (John 20:15). Finally, any hallucination would have had to affect the group, and there appear to have been at least five women involved. The prior probability for a group hallucination under these circumstances is prohibitively low, not in the sense that it is strictly zero but in the sense that it is nowhere near the magnitude of $P(W|R)$ and therefore cannot significantly affect the strength of the argument from W for R.

A century ago, Kirsopp Lake suggested that, in the semi-darkness, the women simply went to the wrong tomb (Lake, 1907, pp. 250-53). The prior probability that the whole group would go to the wrong tomb is low, since according to Luke they saw the place on the eve of the Sabbath (Luke 23:55-56). This hypothesis does account effortlessly for their report of the empty tomb, since on this hypothesis the tomb to which they actually went was empty. But beyond that narrow point the “wrong tomb” hypothesis breaks down sharply since it offers no explanation for the other details in the women’s reports, for their report of having seen the risen Jesus, for the failure of the apostles to set them straight on the actual location of the tomb, or for the failure of the Jewish authorities to clarify the matter.

A more creative attempt to explain part of the evidence in W is the conjecture that Joseph of Arimathea merely stored Jesus’ body in his own tomb temporarily and then moved it on Saturday night after the Sabbath was over to burial in a graveyard of the condemned, unintentionally leaving the women to discover an empty tomb on Sunday morning. The problems with this hypothesis would be difficult to exaggerate. To begin with, it is very difficult to see why Joseph of Arimathea would care enough about what happened to Jesus’ body to provide his own new tomb for it immediately after Jesus’ death but would then want to move it out as quickly as possible after the Sabbath. Joseph Klausner, an early proponent of the theory, merely says, “We must assume that the owner of the tomb, Joseph of Arimathea, thought it unfitting that one who had been crucified should remain in his own ancestral tomb” (Klausner, 1925, p. 357).

Jeffrey Lowder, a more recent advocate of the theory, seems to imply (contrary to Matt. 27:57) that Joseph was not really a follower of Jesus at all, that he was in fact a devout member of the Sanhedrin and (evidently) consenting to Jesus’ crucifixion, and that he merely put the body in his own tomb in the first place because it was near Calvary and he did not want the body to remain unburied over the Sabbath (Lowder, 2005, pp. 267-9). The conjecture that Joseph would have been willing to use his own ancestral tomb for the interment of one he despised and opposed is particularly implausible.

The treatment of Joseph of Arimathea by this theory is strikingly *ad hoc*. The theory accepts his existence from the gospel texts, so as to have a person to whom to attribute the moving of the body, but it alters his attitudes and motives and adds the otherwise unsubstantiated claim that he did in fact move Jesus’ body after carefully burying it in his own tomb. Moreover, there is reason to believe that such moving of a body once buried as Jesus’ body was would have

been contrary to rabbinic tradition (Talmud, *Semahot* IV.7, XIII.6, XIII.7).²⁰

Lowder gives only the feeblest account of why his “Joseph” did not speak out after the disciples began to declare that Jesus was risen, suggesting that he would have thought there was no point in bothering to tell what he knew by Pentecost, when the disciples were preaching Jesus’ resurrection, as the body would have been unrecognizable by then (Lowder, 2005, pp. 288-90). Whether this last forensic claim is true or not, it is absurd to say that there would have been no point in Joseph’s speaking, as he could have testified, as a respected member of the Jewish community, to having moved Jesus’ body and to knowing its present location, and he could have shown that in fact he was in possession of the body of a crucified man. If he were opposed to Jesus and his followers, he would certainly have made some such attempt to debunk the resurrection claims. If he were a follower of Jesus, he would have had no reason to keep his action secret and to leave his fellow disciples to promulgate and die for a falsehood.

Finally, this theory is entirely powerless to explain the women’s claims actually to have seen Jesus.

These hypotheses, weak as they are, exhaust the remotely plausible means of explaining the testimony of the women as reported in the Gospels without appeal to the resurrection. If there was no resurrection, the body was not moved, they went to the right tomb, and their senses were operating correctly, they must have made up the story; therefore if there was no resurrection, either they made up the story (fabrication), their senses were not operating correctly (hallucination), the body had been moved, or they went to the wrong tomb. Yet none of these alternative hypotheses has both a high enough intrinsic credibility and great enough explanatory strength to come even close to rivaling R as an explanation for W.

On any reasonable account, then, W is much more strongly to be expected on the supposition that R than on the supposition that \sim R. Given the textual assumptions we specified at the outset, a factor of 100 seems to us to be a conservative estimate for $P(W|R) / P(W|\sim R)$. As we pointed out above, there is no algorithm for this sort of thing; if someone wants to claim that the foregoing considerations provide only weak evidence for R, we can deplore his judgment but cannot treat the disagreement as if it were a simple computational error. But in view of the wild implausibility of the naturalistic accounts that have been offered, it will be incumbent on someone who does not think that W is strong evidence for R to explain in some detail why we should not judge $P(W|R)$ to be at least several orders of magnitude greater than $P(W|\sim R)$.

The Testimony of the Disciples: Bayes factor analysis

The second fact to be reckoned with is the testimony of the disciples to having seen Jesus risen and their willingness to die for it, a testimony that arose in the context of their demoralization following Jesus’ crucifixion. The issue here is somewhat different from that of the women at the tomb. What draws our attention is not only the disciples’ accounts of their encounters with the risen Christ but also the suddenness of the change in their outlook, the unexpected boldness of their actions, and their willingness to die in attestation of what they

²⁰These rabbinic citations, together with a great deal more discussion of the issues surrounding the theory in question, are collected in Miller (2002).

claimed to have witnessed.

One hypothesis that need not detain us for long is that the disciples themselves did not believe what they were proclaiming, that they were neither more nor less than frauds engaging in an elaborate conspiracy. Under this hypothesis falls the further claim that the disciples themselves – or some subset of them – stole the body, according to Matthew (28:13-15) a charge that arose very early. The conspiracy hypothesis had its heyday in the early 1700s but has had few adherents since. Nor is this a merely sociological point, for the theory never had much to be said in its favor. The prior probability of such a conspiracy in the specific context is not very high. It is hard to see what motive the disciples could have had for planning a conspiracy to convince others that Jesus had risen from the dead. Even before their own warnings from the Sanhedrin after they began teaching that Jesus was risen and spreading the message of forgiveness through his name, they knew full well that such preaching was unlikely to gain them societal power (not counting the possibility of influence in a small and well-hated new sect), sexual gratification, wealth, or anything else of value to unscrupulous men but rather persecution and death. This, in fact, is why they were in hiding after the horror of Jesus' crucifixion. Wisely enough, they wanted nothing better than to remain unnoticed by the Jewish religious leaders and by the Romans.

But the prior problems of the hypothesis are just the beginning. That the vast majority of scholars – skeptical as well as Christian – acknowledge the Easter faith of the disciples is plainly a result of the extremely low explanatory power of the conspiracy hypothesis *vis a vis* the evidence. Why should all of those witnesses die or be willing to die for an empirical claim which they themselves knew to be false, a claim they had fraudulently induced others to believe by way of an act of theft? Even if they had been foolish enough to think initially that they could get something out of such an elaborate scam (perhaps the skeptic would refer here to the fact that early Christians sold their property and brought the proceeds to the apostles for distribution (Acts 5)), they would have had ample opportunity to recant when, as we have documented, they received incontrovertible evidence over a period of months and years that things were not working out according to plan.

Richard Carrier makes an unconvincing attempt to revive the theft hypothesis by conjecturing that one or two followers of Jesus stole his body in order to make it appear that God, despite having previously allowed him to be crucified, had vindicated his good teachings by taking his body up to heaven. Carrier's idea is that these pious thieves had no idea that the theory that Jesus was actually risen from the dead would arise and get so far "out of hand" and that they did not admit what they had done out of the fear of shame before their fellow disciples (Carrier, 2005b, pp. 349-52). But Carrier is forced simply to brush off both the resurrection appearance accounts and the fact that his theory has no explanatory power for them whatsoever. And in his further claims that "the devout" – those for whom Jesus was a "beloved rabbi" – would prefer to believe in a conspiracy by the Jews (as in Matthew's account) rather than give up their belief in Jesus' resurrection, he conveniently elides the fact that the resurrection was accepted in the first place because specific, nameable witnesses said they had seen the risen Jesus. Instead, he simply talks about what devout Christians (who lived, he assures us, in a "superstitious" and "illiterate" society) would be likely to want to think "once inspired to believe in the resurrection of their beloved leader" (Carrier, 2005b, pp. 354-56). This, of course, does nothing whatsoever to

account for the actual evidence, which is not that the pious followers of Jesus were inexplicably and vaguely “inspired” to believe in his resurrection but that a significant number of them claimed actually to have seen and interacted with him repeatedly, over forty days, in a physical body, after his resurrection, and that those very people persisted in this claim and were willing to die for it. The probability of the evidence given conspiracy is ridiculously low, which doubtless accounts for its relative lack of a following even among skeptical scholars.

What, then, gave rise to the enduring Easter faith of the disciples? Could their belief that Jesus had been raised again to life have been an honest error? The possible naturalistic explanations are limited in somewhat the same way as naturalistic explanations for the testimony of the women at the tomb. Purely naturalistic explanations must appeal either to some external factors or to internal experiences. The former fare very poorly as attempts to account for the facts. The wrong tomb theory, already discussed in our analysis of W, is intrinsically highly improbable, since it requires that no one in the entire group of Jesus’ followers even have raised the question of whether the tomb had been properly identified; and in any event it gives no account of the belief of the disciples that they had seen their risen Lord.²¹

In probabilistic terms, where D_i is the testimony of one disciple and X is the disjunction of the external naturalistic theories on offer, $P(D_i|\sim R \ \& \ X)$ is many orders of magnitude lower than $P(D_i|R)$, and $P(X|\sim R)$ is itself exceedingly low. External theories contribute nothing worth mentioning to the overall likelihood $P(D|\sim R)$.

The would-be naturalist is forced, therefore, to search for an internal explanation, some private experience not caused by a public physical stimulus. Given both what the disciples claimed to have experienced and what they endured on behalf of it, vague gestures in the direction of enthusiasm will not do the job. If their belief that Christ was raised from the dead was false, either they had good reasons to believe it or they did not. The analogy of their belief to the subjective enthusiasm of religious zealots assumes that they did not. But their actual actions would be highly improbable under this condition. It is easy to assume that attributing to an individual a very high subjective probability, or degree of belief, is always a good explanation for his actions. But surely it is not in general true that subjective enthusiasm and considered judgment are equally robust causes. A gambler in a fit of frenzy may offer hundred to one odds that the roulette wheel will come up red on the next spin; a trained surgeon might offer similar odds that a certain procedure will cure his patient. But the gambler is apt to sober up quickly and abandon his enthusiasm if his child’s life is put on the line, whereas the surgeon may well proceed even if the patient is his daughter. The manner in which a strong belief is held, in particular the role of evidence in its formation and maintenance, often makes a difference to its value as an explanation for subsequent action. The theory that the apostles believed strongly that Christ rose from the dead but lacked good reasons for that belief has poor likelihood with respect to the evidence at hand.

It is sometimes urged that kamikaze pilots, suicide bombers, and Nazis were willing to

²¹Another external theory, so bizarre as scarcely to be worth mentioning, is that someone else pretended to be Jesus (hated by the local leaders and recently crucified by the Roman authorities), a role Robert Greg Cavin assigns to a hypothetical twin brother (Cavin, 1993, vii, 314-58).

give their lives for what they believed was true.²² The objection may be put more broadly. Virtually every religion has its zealous adherents who have been willing to die for what they believe; why, then, should the willingness of the apostles to die as martyrs be of special epistemic interest? The answer is that this description blurs the distinction between the willingness to die for an ideology and the willingness to die in attestation of an empirical fact.²³ Robert Jenkin put the point with exceptional clarity three centuries ago when he stressed the original meaning of the term *martyrs*:

An ignorant Zeal in a wrong Cause is no Argument against the Goodness of any Cause, which is maintained and promoted by such a Zeal as is reasonable, and proceeds upon sure Grounds. Indeed, it were very hard and very strange, if that which is true, should be ever the less certain, or the less to be regarded and esteemed, because there may be other things, that are false, of which some Men are as firmly persuaded, and are as much concerned for them, as any one can be for the Truth itself. And yet this is the wisest Thing that many have to pretend against the Certainty of the Religion, in which they were baptized, that there are many Impostures in the World, and none is without its Zealots to appear in Vindication of it. I am confident no Man ever parted with any thing, but his Religion, upon so weak a Pretence.

... It is commonly and truly said, that it is not the Suffering, but the Cause, which makes the Martyr; and if Men of false Religions have never so much Confidence of the Truth of them, and have no Ground for it, this can be no Argument against the Grounds and Proofs upon which the Evidence of the Christian Religion depends. Other Religions may have their Zealots, who offer themselves to die for them, but the Christian Religion properly has the only Martyrs. For Martyrs are *Witnesses*, and no other Religion is capable of being attested in such a Manner as the Christian Religion; no other Religion was ever propagated by Witnesses, who had seen, and heard, and been every way conversant in what they witnessed concerning the Principles of their Religion; no Religion besides was ever preach'd by Men, who, after an unalterable Constancy under all Kinds of Sufferings, at last died for asserting it, when they must of necessity have known, whether it were true or false, and therefore certainly knew it to be true, or else they would never have suffer'd and died in that Manner for it; ... (Jenkin, 1734, pp. 529, 531).

It is clear that neither kamikazes, Nazis, nor suicide bombers died to affirm the reality of something that they had seen with their eyes and their hands had handled. Thus, their deaths and the falsehood of some of their beliefs tell us nothing about the probability that a man will die to make an affirmation *like that of the apostles* when it is in fact false. The educational resources of an entire nation, applied over the course of a decade or more to minds at their most

²²Regrettably, this sort of argument is sometimes employed by authors who should know better. (See Plantinga, 2006, pp. 15-16.)

²³This is a point Gary Habermas stresses (Habermas, 2006b, pp. 79-80).

impressionable stage, may be sufficient to induce in the young the general belief that their country or their religion is worth dying for. But what would induce grown men to break with the religious community in which they had been raised and to confess with their blood that they had seen with their own eyes and handled with their own hands their dead rabbi raised again to life?

Suppose, on the other hand, that the witnesses did have good reasons for their belief in the resurrection but were nevertheless mistaken. How is this supposed to have come about? The hallucination theory has at least this advantage over both external naturalistic explanations and the appeal to enthusiasm: the supposition that the disciples suffered from sufficiently vivid and persistent hallucinations provides the resources to explain why they firmly believed they had seen Jesus risen.²⁴ But this gain in explanatory power comes at a prohibitive cost in prior probability, for four reasons. First, the disciples were not in a psychological state that rendered them susceptible to a hallucination. Unlike the eager pilgrims who flock to holy sites hoping to see visions and prodigies, the disciples were not anticipating a miracle of any sort, let alone a resurrection; the gospels make it plain that the disciples, to their embarrassment, did not understand Jesus' somewhat enigmatic predictions of his own death and return to life to indicate an imminent bodily resurrection until after the fact. Their primary emotion was not exalted expectation but a combination of grief and simple fear (Matthew 26:56; John 19:38, 20:19). Messianic expectations in Judaism at the time did not include the resurrection of the messiah except in the general resurrection at the final judgment.²⁵ As we have pointed out, they – collectively at first and individually in the case of Thomas – were understandably skeptical of others' accounts of the empty tomb or of encounters with Jesus. When Jesus did appear to them, they sometimes failed to recognize him (John 21:4-7). These were not men who were likely to suffer a hallucination of any sort, much less one of their risen master.

Second, to explain the facts the hallucination theory would have to be invoked for more than a dozen people simultaneously (Luke 24:36-43).²⁶ The plausibility of a collective

²⁴In the most natural and common meaning of the word, a hallucination is a private experience. (See Slade and Bentall, 1988, p. 16.) Some examples given in popular authors, e.g. Rawcliffe (1959, pp. 114-15), are of misidentification rather than a hallucination properly speaking. See, e.g., the tale of the walking cook in Henry Ellis's abridged edition of John Brand (1842, p. 44). In cases of collective hallucination, expectation, emotional excitement, and suggestion are the primary factors. In particular, "all participants in the hallucination must be informed beforehand, at least concerning the broad outlines of the phenomenon that will constitute the collective hallucination" (Zusne and Jones, 1982, p. 135).

²⁵For an extensive scholarly discussion of messianic expectations and resurrection in Judaism, see Wright (2003), pp. 85-206.

²⁶"More than a dozen" here does not refer to precisely the thirteen witnesses we have listed, because we do not know whether Matthias was with the eleven in the passage cited here, and it seems plausible that James Jesus' brother was not. The phrase rather refers to the fact that, on the account in Luke, several "others" were present on this particular occasion with the eleven.

hallucination is, for obvious reasons, inversely related to the amount of detail it involves.²⁷ Given the level of polymodal interactive detail reported in cases like the one in Luke 24, the probability of coincidence is vanishing. A third factor exacerbates this problem: the hallucinations would have to be not only parallel but also integrated. According to the gospels, the risen Jesus interacted with his disciples in numerous ways including eating food they gave him (Luke 24:41-43) and cooking fish for them (John 21:1-14). In such contexts, the disciples were interacting not only with Jesus but with one another, physically and verbally. The suggestion that their parallel polymodal hallucinations were seamlessly integrated is simply a non-starter, an event so improbable in natural terms that it would itself very nearly demand a supernatural explanation. Finally, these detailed, parallel, integrated hallucinations must be invoked repeatedly across a period of more than a month during which the disciples were persuaded that they repeatedly interacted with their Lord and master here on earth.

And then, abruptly, they stopped. Christ no longer appeared on earth. Whatever their causes, the visions of Peter and Cornelius in Acts and even of Paul on the road to Damascus are qualitatively distinct from these appearances. Paul never claimed that Jesus broke bread with him or ate a meal with him. Theodore Keim's argument on this point is inexorable:

Not one of the five hundred repeats the ecstasy, and all the cases of ecstasy irrevocably end with the fifth vision. What a contradiction of high-swollen enthusiasm and of sudden ebb even to the point of disappearance! Just when fervid minds are beginning to grow fanatical, the fanaticism absolutely and entirely ceases. It might be possible that a few less ardent natures, though perhaps not Peter, rather James, would quickly recover their mental equilibrium; but in the greater number of the twelve and of the five hundred a movement which had burst the dams would certainly not be stayed in an instant; and yet the narrative says nothing of a third vision to the twelve and nothing of a second to the five hundred (Keim, 1883, p. 356).²⁸

From the standpoint of calculating a Bayes factor, the problem with the hallucination theory is that it has a vanishingly small probability conditional on $\sim R$. The sort of complex, repeated, integrated hallucination that would be required to explain even one disciple's testimony and willingness to die for it would represent a serious mental illness. But the advocate of this theory must suppose that it simultaneously struck all of the disciples and left them with a lasting conviction that carried them through their lives and to defiant witness in the face of death. We shall return to this point regarding the cumulative force of their testimony when we come to assess the overall impact of the testimony of the disciples on the argument for the resurrection.

²⁷Rawcliffe (1959, p. 111) points out that the comparatively dissimilar hallucinatory experiences of different people "often attain a spurious similarity by a process of harmonisation" as they recollect and discuss them. But detailed experiences full of verbal and tactile interactions both with the one seen and with other witnesses cannot be brushed aside like this.

²⁸See also Keim's (1883) contrast of these appearances with the Montanist visions of the second century, p. 355.

Naturalistic theories are, therefore, severely wanting. But not all who hold theistic theories agree that Jesus was physically raised from the dead. One popular position has been what Gary Habermas calls the “objective vision” theory, developed by Theodore Keim in the nineteenth century and favored by Hans Grass in the middle of the twentieth, according to which the disciples had, by direct divine dispensation, experiences of the non-corporeal appearance of Jesus that assured them that he was alive and well. Terminology here is somewhat confusing, since in one sense these visions were subjective, instances of “graced seeing” rather than physical events. But advocates of this position have insisted from the beginning that they are not simply collapsing into the naturalistic subjective position. Keim argues that the visions must have been miraculous, and he couples his argument on behalf of the objective vision theory with a vigorous attack on Strauss’s naturalistic vision hypothesis (Keim, 1883, pp. 334ff, particularly pp. 351-60; cf. Fuller, 1993, p. 648).

The objective vision theory thus defined is a theistic theory; anyone who invokes it cannot, for obvious reasons, be using it as part of an argument against the existence of God. Non-theists are apt to think of it as pettifogging on the part of the theists, and in the dialectic of theism and atheism they have a point. Any Christian who explains the testimony of the disciples by appeal to private experiences that cannot be historically demonstrated will find that he is unable to gain much in the way of argumentative traction against a skeptic, who will simply shrug off the suggestion as an attempt to put a theistic spin on simple delusion.²⁹

From the standpoint of a historical apologetic, however, the objective vision theory still poses a challenge since it is clearly intended to be incompatible with any sort of physical resurrection and must therefore be considered as an alternative attempt to explain the Easter faith of the disciples. But for several reasons it is an unimpressive alternative explanation. First, the idea that the disciples had a vision of a Jesus who was physically dead but was speaking to them from heaven has on its face a low likelihood with respect to the evidence of what the disciples said. For Jesus, they said, offered to let them touch him, said expressly that he had “flesh and bones” as a spirit does not have, and, when they were still incredulous, ate fish and honeycomb with them (Luke 24:39ff). On John’s account, they saw him “standing on the beach.” This in itself is hardly the language of a heavenly vision. (Contrast, for example, what Stephen says in Acts 7:56: “I see the heavens opened up and the Son of Man standing at the right hand of God.”) John’s gospel also relates that Jesus cooked fish for them and shared a meal with them by the Sea of Tiberias (John 21:12-14). Whatever else may be the case, it is beyond reasonable doubt that the first Christians believed that Jesus had been physically raised.³⁰ This is clear not only from the early creed embedded in I Corinthians 15:3-8 but also, as we noted above, from the teaching of Peter on the day of Pentecost (Acts 2: 29-32).

Suppose that we assume, though, that the disciples’ visions were experientially exactly as

²⁹Keith Parsons (2005, p. 436) makes this point forcefully.

³⁰Richard Carrier (2005a) has attempted to argue to the contrary. For a critique see Davis (2006, pp. 56-9). Habermas (2006b, pp. 88-89) points out that even scholars such as Gerd Lüdemann who are skeptical of the resurrection acknowledge that the disciples believed that Jesus was physically resurrected.

if Jesus had been raised bodily from the dead, making the objective vision theory phenomenologically indistinguishable from a vivid hallucination theory. It makes no sense to attribute such visions to the power of any being other than the Judeo-Christian God. Zeus, were he to exist, would have no motive for persuading the disciples of the Christ's victory over death. But equally it makes no sense for the Judeo-Christian God to give them such visions. A God who is capable of working miracles – which the God of Abraham and Isaac was certainly conceived to be, and which God would have to be in any event in order to give the witnesses these sorts of visions – and whose followers are strictly enjoined to be truthful would have no conceivable reason for skipping the physical miracle of a resurrection and befuddling His earnest followers into the bargain.

How much weight, then, should we put on the testimony of the disciples? The question is complex in part because of the multiplicity of alternative theories and the varied difficulties they face. But also, as we have argued at length above, we know by name at least thirteen who professed to be eyewitnesses of the risen Christ and were willing to die for this profession, some of them being eventually put to death. So we need to consider not just the implausibility of the testimony of one witness but the compounded implausibility of such testimony from multiple witnesses.

As a first step, let us consider a single disciple. The best of the available naturalistic explanations, the hallucination theory, requires (if it is to match R in likelihood) an extraordinary level of detailed delusion, seamlessly integrated (so far as he can tell) with his experience of those around him. Such delusions do occur in waking life in those who suffer from severe mental illness, but such illness is mercifully rare and is accompanied by other noticeable conditions that were absent in the case of the disciples. The other naturalistic hypotheses have higher prior probabilities, perhaps as high as .001, but they do not come close to matching the explanatory power of R ; their contribution to the likelihood $P(D_i|\sim R)$ is negligible even by comparison to the hallucination theory. The objective vision theory on a plausible construal has very low likelihood; we would not expect a heavenly vision to behave the way the disciples said Jesus behaved and to interact with them in the way that they said he did. We would not expect them to come away from a heavenly vision of Jesus firmly convinced that his body had not decayed and that they had talked and eaten with him physically on earth. A suitably modified vision theory (which we may call O^*) does not have this defect, since $P(D_i|\sim R \ \& \ O^*) = P(D_i|R)$ more or less by definition. But it suffers from the fact that $P(O^*|\sim R)$ is itself very low (say, < 0.001) even if (as few skeptics will grant) $P(T|\sim R) \gg 0$. The simple fact is that if the resurrection did not occur, we would not expect to have anything remotely like the testimony of even a single witness as recorded in Acts and the gospels, his defiance in the face of death, and such a witness's sudden and permanent transformation reported in Acts and confirmed by the evidence of the early church. In the individual case, it would seem that $P(D_i|R)$ is at least three orders of magnitude greater than $P(D_i|\sim R)$.

But having assigned a single factor, we must ask what happens when we take into account the fact that there were thirteen such disciples. We can get a first approximation to the result by assuming independence. Recall, first, that where the pieces of evidence are all independent given R and given $\sim R$, the assumption of independence entails that

$$\frac{P(D_1 \& \dots \& D_{13}|R)}{P(D_1 \& \dots \& D_{13}|\sim R)} = \frac{P(D_1|R)}{P(D_1|\sim R)} \times \dots \times \frac{P(D_{13}|R)}{P(D_{13}|\sim R)}$$

So under the assumption of independence, the Bayes factors for each of the thirteen D_i must be multiplied, which yields a staggering combined factor $P(D|R)/P(D|\sim R) = 10^{39}$.³¹

The Conversion of Paul: Bayes factor analysis

The fourth of our salient facts is the conversion of Paul. It is a striking event, difficult to explain. Saul of Tarsus, fanatical and implacable foe of the Christians and rising star in the Jewish community in Jerusalem, on his way to Damascus with letters of authorization from the high priest in Jerusalem for the explicit purpose of stamping out this upstart sect, was suddenly transformed into an utterly convinced believer in the risen Christ and became Paul the apostle, tireless missionary and ultimately martyr for the religion he had so vigorously persecuted.

From the accounts of Paul's experience given in Acts we know that he took the experience to be an encounter, albeit not an earthly one like that of the disciples, with Jesus – the very Jesus whose followers he was bent on persecuting. And those followers were from the earliest days proclaiming that Jesus had risen *physically* from the dead, a theme on which Paul elaborates in several places. The connection, then, to the resurrection is more direct than it might appear; Paul considered himself commissioned directly by God to preach the resurrection and messiahship of Jesus, and his teaching corresponded to that of the apostles in Jerusalem (Galatians 2:2). His unwavering conviction of that commission permeates both the record of his teaching in Acts and his own epistles. (See, e.g., Acts 22:10-16; Acts 26; 2 Corinthians 1:1; Galatians 1:1, 11-16; Philippians 3:4-8; Colossians 1:1; 1 Timothy 1:1, 12-13.)

The suggestion that Paul was deliberately promulgating something he knew to be false is too absurd to detain us; his ardor for Judaism, his rising status among the Jews, and the opprobrium that attached to Christianity leave no room for any human motive for deceit. He had everything to lose and nothing earthly to gain. Nor need we take seriously the suggestion that he was the victim of an audacious prank, fooled somehow into thinking that Jesus was speaking to him out of heaven while his dumbfounded companions looked on. The fearful Christians were wary of approaching him even after receiving word of his conversion; and even if they wanted to deceive him, there are no means by which they could have contrived, on the open road and in the presence of his companions, any deception that they might hope would convert so determined

³¹Michael Martin (2005, pp. 465-466) estimates – very much off the cuff – a probability of the evidence for the resurrection given that Jesus did not rise of 1/500, saying that this estimate is still “absurdly low,” and he uses this number to replace what he considers an unrealistic estimate of the same probability by Richard Swinburne as 1/1000. But a detailed consideration of the evidence, taking it apart piece by piece and then recombining its force by multiplication, indicates that *both* estimates are far too high. And our estimate here has not yet included the Bayes factors for the other salient facts but only for D.

and powerful an adversary.³²

Perhaps aware of just how feeble these explanations would be, Strauss suggests delicately that Paul might have been overcome by feelings of doubt and guilt during a thunderstorm (Strauss, 1879, pp. 420-25).³³ This remarkable conjecture might be worth discussing were it not for the fact that the doubt, the guilt, and the thunderstorm are all invented out of whole cloth. Having made the insinuation, Strauss wisely drops this hypothesis and takes refuge behind the claim that the book of Acts cannot possibly be historical.

The field of possible explanations for Paul's conversion is therefore reduced to this: either he was subject to an extraordinary – and extraordinarily effective – delusion, or else what he declared to be the cause of his conversion really happened, in which latter case we have as strong an argument as one could wish both for the resurrection and for the truth of the Christian religion. The strength of the evidence for the resurrection from the conversion of Paul is therefore for all practical purposes inversely proportional to the probability that on the road to Damascus he suffered from a hallucination. But as with the hallucination theories invoked to explain the testimony of the disciples, this theory requires layer upon layer of improbability. Delusions that change the minds of vicious persecutors and transform them into faithful martyrs are unfortunately quite rare; one looks in vain for comparable conversions among the notorious murdering zealots of the ages. And it is not just any hallucination we need here, but a complex waking one of the despised Jesus in glory, remonstrating with him. It is, moreover, an odd sort of hallucination that is followed by several days of blindness.

The layers of improbability involved in this hypothesis cannot be evaded without abandoning the text itself and striking off into creative fiction in the manner of Strauss. Taking the secularly described component of the relevant texts at face value, we would suggest that $P(P|\sim R)$ is at best on the order of 10^{-4} and plausibly a good deal lower, whereas on the assumption of R there is no difficulty whatsoever accounting for P . As a consequence, we conservatively take the Bayes factor for the conversion of Paul in favor of the resurrection to be at least 10^3 .

The Collective Force of the Salient Facts

Each of the salient facts surveyed makes a significant contribution to the case for the resurrection. Taken in conjunction, they provide an overwhelming argument for the conclusion that the resurrection did indeed occur.

The first approximation for the strength of the argument should be under the assumption of independence. In that case, we have to multiply the factors in accordance with the formula exhibited above:

³²For a vigorous and extended discussion of these points, still valuable today, see Lyttleton (1800), pp. 1-60.

³³Other contemporaries of Strauss similarly pass over Paul's transformation with nothing worth calling an explanation at all; see, e.g. Geiger (1865, pp. 238-39).

$$\text{Strength of the combined evidence} = \frac{P(W|R)}{P(W|\sim R)} \times \frac{P(D|R)}{P(D|\sim R)} \times \frac{P(P|R)}{P(P|\sim R)}$$

But our estimated Bayes factors for these pieces of evidence were, respectively, 10^2 , 10^{39} , and 10^3 . 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 leave us with a posterior probability in excess of .9999.

It is true that this conclusion is conducted under an initial constraint; it is predicated on the assumption that in matters other than the explicit claims of miracles, the gospels and the book of Acts are generally reliable – that they may be trusted as much as any ordinary document of secular history with respect to the secularly describable facts they affirm. And where they do recount miraculous events, such as Jesus' post-resurrection appearances, we assume that they are authentic – that is, that they tell us what the disciples claimed. This calculation tells us little about the evidence for the resurrection if those assumptions are false. We have provided reasons to accept them, but of course there is much more to be said on the issue.

This limitation, however, is not as severe as might be thought. “General reliability” admits of degrees, and we have deliberately kept our salient facts minimally stated with the intention that they should not require reliance at every point on the smallest details of the biblical texts. The weight placed on our textual assumptions varies from one fact to another and even from one aspect of a given fact to another. The facts we have designated as W are perhaps the most vulnerable to a challenge based on textual skepticism. Some aspects of D – for example, that the disciples made specific claims regarding the physical details of Jesus' post-resurrection appearances – depend more heavily on the authenticity of the sources than others – for example, the witnesses' willingness to die for their belief in the resurrection, which is supported by extra-biblical sources. Finally, as we have repeatedly emphasized, crucial aspects of each of these facts are accepted even by scholars who would deny that the texts are early or highly reliable, with the disciples' belief that they had seen the risen Christ and the conversion of Paul being probably the most widely accepted by otherwise skeptical scholars. All that being said, it is only to be expected that the case for the salient facts is largely dependent on the reliability and authenticity of the most relevant and detailed textual sources available.

Second, the invocation of independence assumptions at several points is contestable; in fact, we believe that in the case of the calculation for D the independence assumption almost certainly breaks down. Surprisingly, however, this fact does not necessarily lessen the strength of the argument. Everything depends on the balance of considerations regarding the direction and extent of the breakdown of independence under R and under $\sim R$. We explore this issue in detail below.

Third, the values we have supplied will certainly be contested. We have provided *prima facie* reasons for the values we give, but it is only to be expected that anyone who denies R will find them unacceptable. On this score, our claim is simply that the arguments we have presented are sufficient to shift the burden of proof for the time being.

One point, however, is largely independent of the values put into the calculation. The use of the Bayesian structure illustrates dramatically how the compounding of independent pieces of positive evidence can rapidly create a powerful cumulative case even for a highly controversial

claim. Historical arguments provide an excellent field for the illustration of this fact. In the felicitous words of Thomas Chalmers, history

is a peculiar subject, and the men who stand at a distance from it may multiply their suspicions and their scepticism at pleasure; but no intelligent man ever entered into the details, without feeling the most familiar and satisfying conviction of that credit and confidence which it is in the power of historical evidence to bestow (Chalmers, 1817, p. 56).

Independence

We have argued that the combined impact of the three lines of argument sketched in favor of R over \sim R is extremely strong. That argument, however, was based on the simplifying assumption that the lines of argument are independent. When it came to the willingness of the thirteen witnesses to die for their beliefs, we also assumed independence and thereby came up with a very high Bayes factor for the cumulative force of their testimony.

Critics of our argument are likely to balk at this assumption. John Venn puts the objection pointedly:

[W]hen two, and of course still more when many, witnesses agree in a statement in a matter about which they might make many and various errors, the combination of their favourable testimony adds enormously to the likelihood of the event; provided always that there is no chance of collusion. ... But then this condition, viz. absence of collusion, very seldom can be secured. Practically our main source of error and suspicion is in the possible existence of some kind of collusion. Since we can seldom entirely get rid of this danger, and when it exists it can never be submitted to numerical calculation, it appears to me that combination of testimony, in regard to detailed accounts, is yet more unfitted for consideration in Probability than even that of single testimony (Venn, 1888, p. 428).

Just as the force of a cumulative case is greatly enhanced by the assumption that the different lines of evidence are independent in their impact on the proposition in question, it is seriously jeopardized by evidence of collusion. If three men accused of committing a crime all give, in essentially the same words, the same innocent explanation of their actions, the plausibility of the claim that they are conspiring to give themselves an alibi undermines the force of their combined testimony. Even when there is no definite intent to deceive, witnesses may influence one another's testimony causally in a way that would obtain even if the event had not happened, or had not happened in the way that they are saying it did. This possibility is relevant to epistemic probabilities when we have reason to suspect this sort of mutual influence. William Kruskal sums up his detailed discussion of independence in the combination of testimony with a succinct cautionary moral: "Do not multiply lightly" (Kruskal, 1988, p. 929). The question of independence is therefore critical.

First, let us consider the independence of the strands of argument which we have labeled W, D, and P. The testimony of the women to the empty tomb and to the appearances of Christ are

independent, obviously, of Paul's conversion, which was not occasioned or rendered more probable by their testimony – which he rejected and after which he was a persecutor of Christians – but rather was caused by what he described as a direct revelation available to him alone. And the other testimonies to the risen Christ, including those of the male witnesses, were of course independent of Paul's conversion, having been given prior to it.³⁴ The women's testimony is essentially independent of that of the thirteen male witnesses. The women were the first witnesses, uninfluenced by the disciples; they came and told the disciples what they had seen before the disciples were making any claim that Jesus had risen. And since the disciples dismissed the women's report, there is no ground for taking the disciples' testimony and willingness to die for it to have any significant probabilistic dependence on the women's testimony.

But the assumption of independence *among* the thirteen male witnesses raises greater difficulties. For even if it is granted that the testimony of the thirteen (D) taken in aggregate is independent of W and of P, it might be argued that the twelve apostles and James the brother of Jesus were not testifying independently of each other and hence that our estimate of the cumulative Bayes factor for their testimony, expressly calculated under independence, is too high. And because there are so many witnesses, D is carrying a large amount of the weight of the case we are making, so the independence assumption there is crucial.

Here is the challenge to the legitimacy of our independence assumption among those thirteen witnesses: Would they not have been more likely to testify as they did and to be willing to die for their claims as a result of the willingness of each other? Were they not encouraging each other by their steadfastness?

The surprising answer is that the force of the case is arguably *underestimated* as a result of the independence assumption. To see why this is so, we must note that the independence of the witnesses' testimony and willingness to die for it holds only if:

$$\frac{P(D_1 \& \dots \& D_{13}|R)}{P(D_1|R) \times \dots \times P(D_{13}|R)} = \frac{P(D_1 \& \dots \& D_{13}|\sim R)}{P(D_1|\sim R) \times \dots \times P(D_{13}|\sim R)}$$

This is true because, on the assumption of independence, the numerator of each ratio is the same as the denominator. Given independence, $P(D_1 \& \dots \& D_{13}|R) = P(D_1|R) \times \dots \times P(D_{13}|R)$, and *mutatis mutandis* for $\sim R$. So under the assumption of independence for both R and $\sim R$, each of the ratios above is simply equal to 1, making them trivially equal to each other.

The objection we are considering is that we should not be allowed to multiply the Bayes factors for the thirteen witnesses and that, if we did not do so, we would end up with a factor significantly *lower* than the 10^{39} we have calculated for their cumulative testimony. It is true that,

³⁴Chronological priority does not in general guarantee independence, but for purposes of calculating the independent force of evidence on R, the question is not independence *tout court* but rather independence modulo R and modulo $\sim R$, respectively, which does appear to obtain here and for which chronological priority is a relevant consideration.

absent independence, it may happen that the above equality does not hold. If the pieces of evidence are positively or negatively relevant to each other, it *might* be the case that the calculation under independence exaggerates their force for R. But this will be the case *only if* the equality above changes to an inequality favoring $\sim R$, like this:

$$\frac{P(D_1 \& \dots \& D_{13}|R)}{P(D_1|R) \times \dots \times P(D_{13}|R)} < \frac{P(D_1 \& \dots \& D_{13}|\sim R)}{P(D_1|\sim R) \times \dots \times P(D_{13}|\sim R)}$$

To illustrate this case, suppose that two witnesses say that H, and each has a Bayes factor of 10 in favor of H, that is, $P(W_1|H)/P(W_1|\sim H) = P(W_2|H)/P(W_2|\sim H) = 10$. If we treat their testimonies as independent, these Bayes factors should be multiplied, yielding a compound Bayes factor of 100 in favor of H. But suppose that we have some reason to suspect that, if H is false, they have colluded in their story, making their testimonies somewhat positively relevant to one another modulo $\sim H$. In that epistemic situation we should not multiply $P(W_1|\sim H)$ and $P(W_2|\sim H)$ when calculating $P(W_1 \& W_2|\sim H)$, because $P(W_1 \& W_2|\sim H)$ would be underestimated by multiplication. How much it would be underestimated would depend on the specifics of the situation and in particular on how probable collusion was given $\sim H$. But in that case, an inequality like the one above would hold; for the witnesses' testimonies would be independent under the assumption of H (since there is no reason to suspect collusion if H is true) but positively relevant to each other given $\sim H$.

The thirteen witnesses for the resurrection did certainly know one another and had ample opportunity to talk with one another. The testimony for the resurrection did not take the form of an experiment in which they were all in isolated rooms, unaware of each others' statements. The worry, then, is that we should take seriously the possibility of $\sim R$ plus some form of collusion or positive mutual relevance, which would raise the probability of the conjunction of all their testimonies under the assumption of $\sim R$ over the probability of their testimonies taken independently and would make the calculation under independence inapplicable.

But when probabilistic independence of testimonial evidence fails, it need not fail in the way sketched above. Probabilistic relevance can be either positive or negative, and in this case we have both sides of the inequality to evaluate. If the inequality breaks the other way, so that

$$\frac{P(D_1 \& \dots \& D_{13}|R)}{P(D_1|R) \times \dots \times P(D_{13}|R)} > \frac{P(D_1 \& \dots \& D_{13}|\sim R)}{P(D_1|\sim R) \times \dots \times P(D_{13}|\sim R)}$$

then abandoning the independence assumption will actually favor R over $\sim R$ and make the case for R from the conjunction of the testimonies stronger than the already huge factor calculated under independence. The critical question, then, is whether R unifies the disciples' testimonies more than does $\sim R$. If independence fails in this particular case, will collusion concerns make the inequality favor $\sim R$, or will we find that the conjunction of the witnesses' testimony is actually better predicted by the assumption of R?

Some of the witnesses in question actually did die for their testimony. For them, we may take the fact in question to be not simply that they were willing to die for their testimony but also that they *did* die. If A dies (especially in some unpleasant way) for his testimony to the risen Christ and B hears about it – and there is no serious doubt that the apostles knew when one of

their number was put to death – does this make B *more* likely to stand firm until death in his own testimony? It seems to us that the opposite is true, that knowing of such a death is plausibly and under ordinary circumstances negatively relevant to B's willingness to remain steadfast. B may well be frightened by the fate of A and drop his claims. In this case, treating A's and B's deaths for their testimony – their “martyrdoms” in the original sense of the term “martyr” as “witness” – as probabilistically independent actually understates the case for R. Since human beings naturally fear death and are horrified by even the account of torture, the martyrdoms may indeed be somewhat negatively relevant under the assumption that their testimony was true. Even men speaking the truth may be frightened out of doing so by hearing that someone else saying the same thing has died for his witness.³⁵ But they are far more negatively relevant to each other under the assumption that their testimony is false. If their deaths are normally expected to be negatively relevant to each other, yet they do in fact go to their deaths, this is well explained by their knowing that what they are saying is the truth and feeling bound by that consideration to persist despite the fears occasioned by news of each others' deaths.³⁶ It is not to be expected at all if this is not the case. In other words, when we consider the deaths of, say, three of the witnesses, R makes better sense not merely of their deaths considered separately but also of the conjunction of their deaths than does ~R. This means that the Bayes factor calculated under independence for these witnesses is lower than the real impact of their martyrdoms warrants.

Short of death itself, suppose we consider the *willingness* of the thirteen witnesses to die. Probably they encouraged each other by their steadfastness in the face of the threat of death; and in that case, the willingness of A to die for his testimony is not independent of but positively relevant to the willingness of B, and vice versa. Does this mean that our case is weaker than the independence assumption would indicate and that it is illegitimate for us to multiply the Bayes factors for each of the thirteen witnesses to obtain a cumulative Bayes factor for all of them of 10^{39} ? Does this make their case like one where we must be concerned about collusion in a falsehood?

Here, too, any dependence among the testimony of the witnesses actually favors our case; the independence assumption, if it has any prejudicial effect, underestimates the force of the evidence for R. When people are claiming to be eyewitnesses to some event (in this case, the appearance of the risen Jesus), and when they are in danger of an unpleasant fate for making the claim in question, their believing and having better evidence for this claim is a better explanation

³⁵This is one of the mechanisms operative in witness intimidation.

³⁶Laplace (1840, pp. 11, 121-22) makes much of the fact that, if a witness has an interest in lying in some particular direction, the value of his testimony in that direction is weakened. This is obviously correct, since the probability of his saying what he does say is in such a case greater than it would otherwise be on the hypothesis that what he says is false. In other words, he might be lying in his testimony because he has a known special interest in making this particular false statement. But Laplace fails to consider that interest can cut both ways. If lying in that particular way is highly likely to get you killed in a most unpleasant way, you have a special interest in *not* lying in that particular way. Anything that increased the apostles' expectation that persisting in their testimony would lead to unpleasant death decreased their interest in persisting.

of positive dependence among their accounts – their being able to encourage one another to continue making their testimony – than their not believing the claim or having worse evidence for it.

Consider, for example, the sub-hypothesis under $\sim R$ of fraudulent collusion. Not only does it have a low prior probability and low likelihood relative to the behavior of the disciples taken individually, it is also unable to explain any influence the witnesses were able have upon one another to encourage each other to continue their witness in the face of danger of death. Would rogues and liars have any such effect upon one another? On the contrary, if two men both face unpleasant deaths for a lie which they have concocted, the intransigence of one is most unlikely to influence the other to remain steadfast in the fraud. The evidence included in D is not simply that the witnesses in question made a single statement that Jesus was risen from the dead but that they persisted in their witness under threat of death. Under the assumption of $\sim R$, then, the extreme conditions of duress upon multiple witnesses to drop their story makes collusion a poor explanation of their collective persistence. On the assumption of $\sim R$ such persistence would be at best independent rather than a result of mutual influence. So if multiple witnesses are able to influence one another to remain steadfast in some story in the face of unpleasant consequences for telling that story, this is itself evidence that they believe that the story is true rather than that they are colluding in a lie. Hence, acknowledging the plausibility of mutual influence among the disciples, that influence does not occur under the sub-hypothesis of initial collusion under $\sim R$ but rather under the assumption of R.

So far, it appears that the crucial inequality favors R rather than $\sim R$ if we abandon independence. But a critic might respond that what really matters, where the failure of independence is concerned, is neither conspiracy nor courage but rather something more like irrational religious enthusiasm or perhaps some non-specific version of the objective vision hypothesis. People can and do work one another up to behave irrationally and to stick to an ideology or to a bizarre religion in the face of opposition. We have already considered and rejected the religious enthusiasm hypothesis as an explanation of the evidence of the disciples' testimony. One of the points we made there is that this is not a case of commitment to an ideology or set of religious propositions but to an empirical claim which the people in question were in a position to know to be true or false. And we have already rejected the generic vision hypothesis on the grounds that it does not account for the testimony each of the witnesses actually gave. But how do these hypotheses affect the issue of independence?

If two witnesses did not both have excellent evidence for such an empirical claim – if one or both of them merely felt religiously enthusiastic or had a fuzzy vision or vague experience – how likely is it that they would be able to influence one another to remain steadfast in their empirical testimony in the face of the likelihood of death? They are claiming not simply that Christianity is true but rather, concretely, to have seen the risen Jesus. They are the originators of this new religious movement, and others believe the distinctive claims of that movement such as “Jesus is Lord” on the basis of *their* testimony to an empirical fact, their physical encounters with the risen Jesus. This is emphatically not a case of their being committed to Christianity to the point of being willing to suffer martyrdom because they have taken someone else’s word for its creedal claims, been raised in it as part of their religious or cultural identity, felt themselves part of a community, or anything of the sort. If any one of the witnesses in question had not actually

had clear and realistic sensory experiences just as if Jesus were physically present, talking with them, eating before them, offering to let them inspect his hands and side and the like, it is not credible that he would listen to the urging of his fellows to remain steadfast in testifying to such experiences. To paraphrase Samuel Johnson, the credible threat of death concentrates the mind wonderfully; it tends to winnow the wheat from the chaff when it comes to good and bad evidence.

We must conclude that if the thirteen witnesses did influence one another to continue in their testimony, this positive influence itself is best explained by their really having seen and heard what they said they had seen and heard. Dependence among the thirteen's willingness to die arises in this context on the hypothesis that they all had excellent firsthand evidence that they were telling the truth and that they were encouraging one another not to give in to the fear of death and deny the truth to save themselves. In this case, as in the others, if we take a close look at the way that independence breaks down we find that R unifies the witnesses' persistence in the testimony they actually gave better than do the sub-hypotheses under $\sim R$ of religious enthusiasm or some sort of generic heavenly vision, though these factors might under *other* circumstances be expected to account for the willingness of a whole group of religious believers to die and for their influence over one another. Here again, the independence assumption underestimates the force of the argument for R.

It might be replied that we are assuming that under $\sim R$ the evidence is worse than under R. For the most part that is true, but there are two sub-hypotheses under $\sim R$ that have equal likelihood to R with respect to positive dependence among the witness of the thirteen: (1) the hypothesis that all thirteen of them just happened to have similar and absolutely convincing hallucinations as if of the risen Jesus – experiences *exactly like* those they would have had if he were really risen and appeared to them, spoke with them, offered to eat with them, and so forth – while R was in fact false, and (2) the specific version of the vision hypothesis (which we have called O*) that is just like hallucination in its phenomenological effects but with the added claim that these experiences were sent to the disciples by God or by Jesus in heaven.

We have already considered the hallucination hypothesis and rejected it as an enormously improbable sub-hypothesis under $\sim R$. We have made a similar argument for O*; its ability to account for the evidence, like that of naturalistic hallucination, is purchased at the expense of its having only a negligible slice of the probability space under $\sim R$. But the improbability of these theories is particularly manifest when we are asking them to provide an explanation not just of the fact of the witnesses' testimony as individuals but of their ability to encourage one another to maintain that testimony in the face of danger of death. For to explain that, such theories need to be the cousins of a Cartesian Evil Deceiver hypothesis where everything is “just as if” Jesus were really there and is just like that for all thirteen of the witnesses in question, sometimes when they are together and interacting with each other, and so forth. If such an hypothesis does not make everything evidentially just as if Jesus had really appeared physically, alive, after his resurrection as the disciples believed to be true, the problem already considered for religious enthusiasm and vaguer visions arises: witnesses who had unclear experiences are likely to ignore the urgings of their fellows and apostasize. If the urgings of A move B to hold firm regarding an explicit empirical claim, this is best explained by the assumption that B himself has had so clear and unequivocal an experience that he knows A is urging him to do what he ought to do anyway. And

the same is true if A falters through fear and is encouraged by B.³⁷ The prohibitively low prior probability of these two hypotheses becomes especially clear if we assume and seek to explain an effect of mutual encouragement among that many witnesses.

In considering matters of explanatory power, it is important to keep in mind that if a sub-hypothesis H has a negligible prior probability under $\sim R$, then even if H predicts the evidence with a high probability it will add little to the average probability of the evidence given $\sim R$, which is what is relevant to the Bayes factor. An extreme hallucination theory or hallucination-like objective vision theory can unify the disciples' steadfastness and testimony as well as does R; but this gives little help to $\sim R$ as a whole in terms of unifying that testimony, because these theories are so improbable under $\sim R$. Taking $\sim R$ as a whole, then, we conclude that the crucial inequality favors R: if we take into account the influence of the disciples on one another, the influence is of the sort more to be expected on the assumption of R than on the assumption of $\sim R$. Hence, the independence assumption, which has already given us so overwhelming a Bayes factor for the testimony and steadfastness of the thirteen witnesses, has the effect of underestimating the force of their combined evidence.

Hume's Maxim and World-view worries

Historically, critics of the historical case for the resurrection have adopted two major strategies. The first is to engage with the evidence in detail – to dispute the facts on which a given version of the historical case is based, to offer an alternative, non-miraculous explanation of the facts, or both. The second is to take an oblique approach – to stay out of the details and to look instead for very general considerations or abstract arguments that will undermine the historical case without requiring a direct engagement with the evidence. In the preceding pages we have addressed some of the primary moves associated with the first strategy. We now turn to the second.

The most famous instance of this strategy is Hume's essay "Of Miracles," first published in 1748. In part one, Hume lays out an argument that would undermine the rationality of belief in miracles on the basis of any testimony whatsoever. "A miracle," he explains,

is a violation of the laws of nature; and as a firm and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as entire as any argument from experience can possibly be imagined. . . . [I]t is a miracle, that a dead man should come to life; because that has never been observed in any age or country. There must, therefore, be a uniform experience against every miraculous event,

³⁷ The implausibility of such hallucinations or visions for all the witnesses is notable in a special way in the case of James Jesus' brother, who was not even with the other disciples at the time of the putative post-resurrection appearances. While the problem with their simultaneous experiences lies in part in the need for them all to be interacting with each other and with Jesus as if he were physically present when in fact he was not, the problem with James's conversion is that it would have had to happen, coincidentally, in virtue of a similar experience at about the same time.

otherwise the event would not merit that appellation. And as a uniform experience amounts to a proof, there is here a direct and full *proof*, from the nature of the fact, against the existence of any miracle; nor can such a proof be destroyed, or the miracle rendered credible, but by an opposite proof, which is superior (Hume, 1748, pp. 86-87).

The point here appears to be that a report of a miracle is, by definition, at an epistemic disadvantage; it is defined in terms that guarantee that there is a powerful, perhaps insuperable, case against it. In what Hume calls a “contest of two opposite experiences” (Hume 1748, p. 86), the testimony for a miracle and the testimony for the unbroken uniformity of natural law, the one that is “as entire as any argument from experience can possibly be imagined” can scarcely come off second best.

But the language of “contest of experiences” is misleading. There is direct testimony for the resurrection of Christ. The observation that dead men generally remain dead has a bearing on the probability of a resurrection in a particular case, but that bearing is indirect and inductive; it is by no means as strong as if all or even a few of these witnesses had directly observed the cold, lifeless, unmoving body of Jesus and opposed their testimony to that of the women and the disciples that he was *at that very moment* alive and well and talking to his disciples in Galilee. To be sure, the inductive evidence creates some presumption against the particular miracle report, but as the protagonist in Thomas Sherlock’s *Tryal of the Witnesses of the Resurrection* points out, that presumption is not insuperable.

Suppose you saw a Man publickly executed, his Body afterwards wounded by the Executioner, and carry’d and laid in the Grave; that after this you should be told, that the Man was come to Life again; what would you suspect in this Case? Not that the Man had never been dead, for that you saw yourself: But you would suspect whether he was now alive: But would you say this Case excluded all human Testimony, and that Men could not possibly discern whether one with whom they convers’d familiarly was alive or no? Upon what Ground could you say this? A Man rising from the Grave is an Object of Sense, and can give the same Evidence of his being alive, as any other Man in the World can give. So that a Resurrection considered only as a Fact to be prov’d by Evidence, is a plain Case; it requires no greater Ability in the Witnesses, than that they be able to distinguish between a Man dead and a Man alive; a Point, in which I believe every Man living thinks himself a Judge.

I do allow that this Case, and others of like Nature, require more Evidence to give them Credit than ordinary Cases do; you may therefore require more Evidence in these, than in other Cases; but it is absurd to say, that such Cases admit no Evidence, when the Things in Question are manifestly Objects of Sense (Sherlock, 1765, pp. 63-64).

Hume concludes the first part of his essay with a “general maxim”:

[N]o testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavours to

establish (Hume, 1748, p. 87).

This has a ring of profundity, but it is hardly a deep insight. The maxim turns out, on examination, to say nothing more than that for the event to be believable, the testimony must render it more probable than not. As John Earman observes:

All of the parties on the opposite side from Hume in the eighteenth-century debate on miracles knew that miracle claims could not be established without the help of very strong evidence. In some cases they thought they had produced the required evidence. Perhaps they were wrong. But to show that they were wrong takes more than solemnly uttered platitudes (Earman, 2000, p. 42).

Earman concludes that Hume, if he wished to undermine rationally the argument for the resurrection, was bound to do what he was most determined not to do – to “leave the high ground and descend into the trenches” and there to engage with the specific historical evidence for Christianity (Earman, 2000, p. 70).

Earman argues persuasively that Hume’s maxim, viewed probabilistically, is an innocuous truism (Earman, 2000, pp. 38-43). But perhaps it is possible either to interpret Hume in some different way or, at least, to say something in the spirit of Hume that makes it unnecessary for the skeptic to descend into the trenches.

In a letter to Hugh Blair, Hume lets fall a comment that sheds some light on why he felt that there must be a sweeping dismissal of all miracle claims. “Does a man of sense,” he asks, “run after every silly tale of witches or hobgoblins or fairies, and canvass particularly the evidence?” (Campbell, 1839, p. 7; see Earman, 2000, p. 59) The question appears to provide the handle the skeptic needs to turn Hume’s maxim into something more than the statement that the evidence for a miracle needs to be enough to support belief in a miracle. If the tabloid in the supermarket checkout lane proclaims that little green men have descended on a Midwest corn field, captured several people, and declared their intention to take over planet Earth, most of us would understandably not waste our valuable time reading the testimony of the “witnesses”; even if they expressed their willingness to die in the attempt to save the world from the aliens, we would probably conclude that they were insane, running a scam of some sort, or had been taking hallucinogenic drugs at the time of the alleged incident.

Skeptics confronted with claims for the miraculous are likely to take a similar attitude, to think that they need not bother thinking too much about the specific evidence in specific instances, because the prior probability that a miracle would take place is so low that, as in the case of the alleged alien kidnapings, it is not worth their time to investigate any specific miracle claim. And even Christian apologists have been concerned to varying degrees by the possibility that the prior probability for a miracle might be “too low,” making their attempts to argue for a particular revelation from God pointless.

One of the most moderate and philosophically careful statements of a concern of this sort comes from Richard Swinburne.

Reports of observations are rightly viewed very sceptically when the phenomena

purportedly observed are ruled out by a well-established scientific theory, but believed when they are to be expected in the light of such a theory. If you have a well-established theory which says that change does not occur in the heavenly regions..., you will rightly discount reports of observers on a particular occasion who claim to have observed a new star appear where there was no star before (Swinburne, 1992, p. 69).

There is no question here of Swinburne's saying that *no* evidence in favor of a revelation can overcome a prior probability that is "too low." Swinburne is too knowledgeable about probability theory to say anything of the sort; he confines himself merely to pointing out that revelation claims will require less in the way of specific evidence than they otherwise would require if there is evidence from natural theology that renders the prior probability of a miracle something better than abysmal.

Others, less knowledgeable about the probabilistic issues than Swinburne, have said in so many words that a successful natural theology *must* precede historical apologetics, because otherwise it would be impossible to argue for specific miracle claims.

Natural theology shows that there is a God. If there is a God, miracles are possible. If a God exists who created the world and operates it, there can be no doubting that He can modify His *modus operandi*. On the other hand, if we did not know that there is a God, we would have to step into an irrational view of the operation of nature by chance....[M]iracles cannot prove God. God, as a matter of fact, alone can prove miracles. That is, only on the prior evidence that God exists is a miracle even possible (Sproul, Lindsley, Gerstner, 1984, p. 146).

Even allowing for the imprecision of the use of "prove" here, Sproul et al. appear to be making a simple scope error, confusing "not knowing that there is a God" with "knowing that there is not a God." Their claims about the necessity for a preliminary natural theology fall into place once that error is made but are simply unargued assertions without it. Yet the nagging worry may remain, even without the simple error – is it possible to argue for a specific miracle unless one has first, on the basis of prior evidence, shown to a tolerably high probability that God exists?

It is not only contemporary apologists like Sproul who have espoused strong views about the importance of one's prior stance towards the miraculous. In fact, those on the other side of the debate have made some of the strongest statements. Hume himself is no friend to natural theology; his maxim hardly amounts to an encouragement to apologists to prepare the ground for their arguments by doing natural theology. The Marquis de Laplace, implicitly echoing Hume, says of reported miracles, "There are things so extraordinary that nothing can balance their improbability" (Laplace, 1840, p. 119). And J. L. Mackie, with explicit reference to Hume, says this:

Here one party to the debate is initially at least agnostic, and does not yet concede that there is a supernatural power at all. From this point of view the intrinsic improbability of a genuine miracle ... is very great, and one or other of the alternative explanations in our fork will always be much more likely – that is, either that the alleged event is not

miraculous, or that it did not occur....

This entails that it is pretty well impossible that reported miracles should provide a worthwhile argument for theism addressed to those who are initially inclined to atheism or even to agnosticism.... Not only are such reports unable to carry any rational conviction on their own, but also they are unable even to contribute independently to the kind of accumulation or battery of arguments referred to in the Introduction. To this extent Hume is right... (Mackie, 1982, p. 27).

Laplace and Mackie are not making merely descriptive statements about what the skeptic will think, about what is likely or unlikely to persuade. They are making claims about how the epistemic situation must be: If you do not believe in God, no argument can ever convince you otherwise.³⁸

But what reason is there to think this to be true? Laplace and Mackie seem to be making something like Sproul's claim that one should consider miracles possible only if one already believes in God. The idea, if we translate it into probabilistic terms, seems to be that there is some cut-off point in the prior probability of a miracle that is "too low" for evidence – any evidence – to overcome, as though the slope the evidence has to climb becomes impossibly slippery once it is very steep. And the notion of a prior improbability that is too great to be overcome is, of course, very much in the spirit of Hume.

Thus far, this is simply a vague intuition and one that, on its face, is probabilistically incorrect. For any real, non-zero prior improbability can be overcome by sufficient evidence. Virtually all of Hume's critics, and quite a number of the orthodox writers before Hume, stressed that there can be no insuperable presumption of this sort. There is, as Gladstone remarks, "no limit to the strength of working, as distinguished from abstract, certainty, to which probable evidence may not lead us along its gently ascending paths" (Gladstone, 1896, p. 349; cf. Earman, 2000, pp. 53ff).

To give the claim a better run for its money, we might turn instead to a probabilistic point made by Jordan Howard Sobel: When we are considering the question of whether a miracle has taken place, and when we are presented with what purports to be evidence for it, it is a necessary condition for the miracle's posterior probability, conditioned on that evidence, to be greater than .5 that

$$P(M|K) > P(\sim M \& E|K) \text{ (Sobel, 2004, p. 317).}$$

In other words, the prior probability of the miracle must be greater than the prior probability that the miracle does not happen and that we also have the evidence in question. This inequality seems, at first glance, to place an enormous amount of epistemic pressure on the prior probability of a miracle and to cause worries for the apologist if that prior probability is "too low." After all, if we admit up front (as we should) that on ordinary background evidence M is less probable than $\sim M$ for any given miracle, it might seem that the question then becomes, "How much less

³⁸Similarly, Dale Allison insists that historical arguments for the resurrection are irrelevant when it comes to establishing a worldview (Allison, 2005, p. 342).

probable?" What if it is a great deal less probable? Does this not mean that it might be "too hard" for the only sort of evidence we can get to overcome so great a prior disparity?

Consider one version of Sobel's inequality, discussed by Earman, in which for simplicity's sake it has been taken that a witness's being deceived is the only way in which the witness could testify to a miraculous event if the event had not taken place (Earman, 2000, pp. 47-48). "Deception" here apparently includes mistake, self-deception, or deliberate deception by others. Then, $P(D|\sim M \& K)$ is simply the same thing as $P(t(M)|\sim M \& K)$, where $t(M)$ means the testimony to a miracle. The upshot is a special case of Sobel's inequality such that, for the posterior probability of a miracle, conditioned on $t(M)$, to be greater than .5, it is a necessary condition that

$$P(M|K) > P(\sim M|K) P(D|\sim M \& K).$$

The term on the right is equal to $P(\sim M \& D|K)$, which is just the same as the right-hand term in the simpler version of Sobel's inequality, since the only way to have the evidence in the absence of the miracle under the given assumptions is for the witness to have been deceived. If the apologist acknowledges that the prior probability of $\sim M$ is very high, the only way for this inequality to hold is if the probability that the witness mistakenly believes a miracle to have occurred is extremely low. Once we have acknowledged that the prior probability of a miracle is low, does it not seem irrational to consider it to be higher than the probability that a witness will be deceived?

But a skeptic who wishes to make that claim cannot remain "above the fray." We have argued above that, given the Bayes factors of the various pieces of evidence, their cumulative impact would overcome a prior probability of R of 10^{-40} while leaving us with a posterior probability of approximately .9999. Even an exceptionally low prior may be overcome by extremely strong evidence. That argument deserves to be answered on its own terms, and it illustrates quite handily the fact that there is no such thing as a finite prior probability that is so low as to be "slippery" and hence impossible to overcome by evidence.

Certainly, a major point in the defense of the Bayes factors we have assigned is the extremely low probability of the specific evidence in question given $\sim R$, and this includes the very poor showing for explaining the evidence in question of hypotheses in which the witnesses were "deceived" – that is, mistaken or self-deceived – in thinking that they saw the risen Christ over the course of forty days. But this question can be decided only by considering the *specific* testimonial evidence in question under the *specific* circumstances. We are not considering in the abstract the probability that some miracle or other will fail to occur and that some witness or other under unspecified circumstances will mistakenly think that a miracle has happened. We must always be concerned with the specific evidence and the specific circumstances. The mere fact that we are, as it were, looking ahead and imagining the probability that the resurrection does not occur and that we have the testimonial evidence in question does not mean that we are considering the matter in an abstract fashion.

Moreover, the Sobel inequality does not really give us very much epistemic insight, if only because it is a necessary but not a sufficient condition for the posterior probability of a miracle to be greater than .5, a fact also noted by Earman (2000, p. 40) in rejecting it as an

interpretation of Hume. If, for example, $P(E|M)$ were equal to or even lower than $P(E|\neg M)$, conditioning on E would not raise M to a posterior probability greater than .5.

Recall the odds form of Bayes's Theorem, as applied to a miracle and some putative evidence for it:

$$\frac{P(M|E)}{P(\neg M|E)} = \frac{P(M)}{P(\neg M)} \times \frac{P(E|M)}{P(E|\neg M)}$$

What must do the work in raising the probability of M from a poor prior to a respectable or even imposing posterior is the ratio of the likelihoods – the second ratio on the right. It is true that, if the posterior probability of M is greater than .5, this entails the satisfaction of Sobel's inequality. But the force of the argument comes from the ratio of the likelihoods, and if that ratio is sufficient to make the posterior of M greater than .5, this merely means that the Bayes factor has brought about the satisfaction of that inequality *ambulando*, because the evidence makes a strong argument for M .

We shall learn very little from staring at the Sobel inequality and asking ourselves whether the prior probability of M is greater or less than the prior probability that some witness will be mistaken or even will commit fraud. For one thing, such a procedure, by considering only an inequality and not either the force of the evidence (via a Bayes factor analysis) or any specific prior probability for R , caters to our biases either for or against a miracle. The theist or Christian may think the argument stronger than it is if he simply has to consider whether it is more probable that the witness gave his testimony falsely or that a miracle occurred. Similarly, the skeptic may casually say that he will *always* consider the inequality to fail to be satisfied for any testimonial evidence. If we focus instead, as our argument here has done, on the force of the evidence itself, the skeptic is forced to ask himself whether he really considers the prior probability of the resurrection of Jesus Christ to be lower than something like 10^{-43} – and if so, why.

Moreover, anyone who contemplates this inequality without considering exactly what the testimonial evidence is and exactly what sort of circumstances are supposed to attend it is almost certain to misevaluate the resultant probability. According to Mackie, even a skeptic who seemed to see a miracle with his own eyes would have to leave open the possibility that his senses were deceived, “as anyone knows who has ever been fooled by a conjurer” (Mackie, p. 28). But no one is foolish enough actually to claim that someone was working a David Copperfield-style magic trick to deceive the disciples into thinking that Jesus was risen. The allusion to magic is irrelevant to the resurrection; and to ask in general terms whether it is likely that a miracle will not occur but someone will be deceived, perhaps by a conjurer’s trick, is a piece of misdirection. The question, rather, must be this: What is the probability that Jesus will not rise from the dead and that, nonetheless, women will testify that his tomb is empty and that they have seen him, thirteen men will all be willing to die for the claim that they have seen him, spoken with him, and received enormous amounts of direct empirical evidence for his physical resurrection over a period of forty days, and a persecutor of his followers will suddenly, upon what he claims to have been a vision of the resurrected Jesus, become an ardent preacher of the Christian message? And what is the probability that all of this will happen in a first-century Jewish context, with all that that means in terms of lack of resources for a convincing fraud, probable death for such claims,

low opinion of the testimony of women, and all the rest of the details? In other words, the skeptic must examine, in detail, the relative explanatory power of R and $\sim R$ for the *specific* evidence in its *actual* context.

Here Earman's self-deprecating reference to his own cynicism is also relevant. Though he has argued at length and with care and accuracy that there is no in-principle argument against the establishment of a miracle by testimony, Earman comments that his one agreement with Hume is that he, like Hume, is personally disinclined to examine in detail evidence for specific miracle claims, even evidence given by multiple witnesses. Rather charmingly, he acknowledges that this disinclination cannot be given any *a priori* philosophical underpinning and does not yield any lofty principle to guide inquiry. But it is interesting nonetheless to see the form his skepticism takes. He analogizes UFO abduction stories, religious miracle claims, and the subset of the latter involving witnesses at faith healing services, and says that he is personally inclined to think of all of these as involving "a palpable atmosphere of collective hysteria that renders the participants unable to achieve the minimal reliability condition" (Earman, 2000, pp. 59-61).

The minimal reliability condition as Earman defines it is the requirement that the Bayes factor for the evidence of a witness's testimony favors M (the occurrence of the miracle) over $\sim M$ (Earman, 2000, p. 55). Earman's own reference to the atmosphere – the surrounding circumstances – of a faith healing service is itself the key to the apologist's answer to his brand of cynicism. For, as we have pointed out repeatedly, the witnesses who claimed to have seen the risen Jesus were *not* in a state of palpable excitement or enthusiastic hysteria at the time; they were not attending a meeting where they expected to see wonders. On the contrary, the women were going to anoint a dead body, and the disciples were hiding in fear and showed themselves notably skeptical of claims that Jesus was risen. If we accept at all the evidence that these people claimed to have seen the risen Jesus, we must do so on the basis of textual sources that give us strong evidence against the hypothesis that they worked themselves into a frenzy of expectation and, as a result, suffered detailed and sustained hallucinations. In other words, the "reliability" of witnesses is perhaps a slightly confusing term. We should speak rather of the explanatory power of the hypothesis that the event took place. This will be in part a function of what else we may happen to know about the probity of the given witness, but it will also be in no small degree a function of the various alternative sub-hypotheses available to explain what, specifically, the witnesses said in the specific circumstances in question. The Bayes factor involves an evaluation of all of these, and it is for this reason that Earman says, quite rightly,

I acknowledge that the opinion is of the kind whose substantiation requires not philosophical argumentation and pompous solemnities about extraordinary claims requiring extraordinary proofs, but rather difficult and delicate empirical investigations... into the details of particular cases (Earman, 2000, p. 61).

All of which brings us back to the attempt to back off from these details by reference to other claims of wonders. The modern version of Hume's comment to Hugh Blair is the skeptic's scornful challenge to the apologist, "So, are you going to examine the specific evidence for every UFO abduction claim?" And the answer is that even a cursory understanding of what is involved in such stories shows them to have no such claim on our investigative time as does the evidence

for the resurrection of Jesus Christ. Is anyone stoned, crucified, or killed with the sword for claiming that he has been given a tour of a space ship? The explanatory power of fraud is, on the face of it, enormously higher for the sort of evidence we have in those cases than for the evidence for the resurrection of Christ.

The Christian need never claim that testimony as such, testimony to any event under any circumstances and in any context, has a claim on our attention and belief. He should always draw attention to the striking and powerful nature of the specific testimony for the central miracle of his own faith. As Jacques Saurin (1843, vol. 1, p. 193) said, after canvassing particularly the evidence for the resurrection, “Was ever joy so rational?”

Plantinga's Principle of Dwindling Probabilities

One of the few novel probabilistic objections to the historical argument for Christianity has come in recent years from renowned Christian philosopher Alvin Plantinga in the form of a probabilistic strategy based on what he calls the Principle of Dwindling Probabilities (PDP) (Plantinga, 2000, pp. 268-80).

Plantinga attempts to show roughly the probabilistic form that, in his view, the historical argument for Christianity takes, with the intention of arguing that it cannot bear the weight apologists have given it. His version of the historical argument chains together a series of propositions, assigning each one some probability which he considers generous, and treating the calculation of the conditional probability of one proposition on another or a set of others as an argumentative step. In this attempted reconstruction, Plantinga starts with our background knowledge K, which he defines as “what we all or nearly all know or take for granted or firmly believe, or what at any rate those conducting the inquiry know or take for granted or believe.” He next considers the bare theistic claim that

T: God exists

and for the sake of the argument assigns it a probability of at least .9, conditional on K. Then he considers the probability (always relative to our background) that, given T,

A: God would want to make some sort of revelation of Himself to mankind.

Granting this as well, Plantinga moves on to

B: Jesus' teachings were such that they could be sensibly interpreted and extrapolated to G, the great claims of the gospel,

where G includes central Christian teachings about sin, the incarnation, the atonement and the general availability of salvation. Supposing K, T, A, and B, he next considers the probability that

C: Jesus rose from the dead.

Now taking K, T, A, B and C together, he assesses

D: In raising Jesus from the dead, God endorsed his teachings.

Finally, conditional on K, T, A, B, C and D, Plantinga considers the probability of the conclusion

E: The extension and extrapolation of Jesus' teachings to G is true.

Plantinga's contention is that, since the connections between and among these propositions are non-deductive, we must consider the possibility of a breakdown in the chain at every point. Hence he multiplies the probabilities he has estimated using the Theorem on Total Probability and obtains a value just a bit over .21. He therefore concludes that the most we are entitled to say is that $P(E|K) \geq .21$. And since he considers his probability assignments for individual propositions to have erred on the side of generosity, he thinks that this is if anything an overestimate of the value of the historical argument for the truth of Christianity. "Our background knowledge, historical and otherwise," Plantinga concludes, "isn't anywhere nearly sufficient to support serious belief in G" (Plantinga, 2000, 280).

But Plantinga's version of the historical argument has some peculiar features that make the case appear weaker than it really is. In understanding what is wrong with Plantinga's approach both to portraying and to critiquing the historical argument, we shall come to see better the relationship of the historical argument to natural theology and to theism.

The attempt to apply the PDP to the historical argument depends crucially on the issue of inference. How and why does Plantinga treat theism as a premise for Christianity? And how is this picture of the inference incomplete and, hence, confusing regarding the ultimate strength of the case?

To understand why it seems to Plantinga that the PDP is relevant to the historical case, consider the general procedure by which one views a set of evidence and a conclusion through the lens of the PDP. Begin with some proposition A that is positively relevant to some other proposition B but that is strictly weaker than B – that is, B entails A but not *vice versa*. Pick propositions A and B such that one could plausibly consider the weaker proposition A as a premise in an argument for the stronger proposition B. Note that, on ordinary background evidence, A will be more probable than B and hence $P(A)$ will set an upper bound on $P(B)$. Estimate, off the cuff, a probability for A on total evidence, trying in some vague fashion to be generous in this estimate. Treating A as a premise for B, construct an argument consisting of a chain of propositions leading from A to B. Apply the Theorem on Total Probability to show that the lower bound of an inequality representing $P(B)$ on total evidence can end up much, much lower than the original probability estimated for A. Point out triumphantly that, once one has made such a "generous" guess at A's probability on all evidence, it is all downhill from there (see McGrew & McGrew 2006, p. 30).

In Plantinga's example concerning the historical argument, the simpler proposition with which he starts is the assertion of mere theism (T), and the conclusion (E) is the truth of G, which we might call mere Christianity. As in the strategy just sketched, Christianity does entail theism but not *vice versa*, so that in a single consistent probability distribution, the probability of theism

puts an upper bound on the probability of Christianity. And the .21 lower bound of the inequality Plantinga eventually obtains is indeed a good deal lower than the .9 he has originally estimated for theism on total probability. Since Plantinga gives us only an inequality, one might initially think that this means very little; a mere inequality is compatible with there being a much higher actual probability for Christianity, supported by the public evidence. But since Christianity entails several of the propositions in Plantinga's chain (T, A, and C), the inequality seems to have something more than a merely formal significance.³⁹

Plantinga treats not only theism but also the other propositions he concatenates as premises for Christianity, and in response to the suggestion that the independent evidence for the resurrection itself supports theism and that therefore inferential support of the resurrection for theism must be taken into account, he insists that the inference must go from theism to the resurrection (Plantinga, 2006, pp. 13-14).

Since this matter of premises is so central to an understanding of what is wrong with the use of the PDP in this context, we need to see clearly what it means to say that theism is a premise for the resurrection (or for Christianity) and that the resurrection is a premise for theism. And to understand those relations, we need to understand more about the use of uncertain intermediate premises – intermediate, that is, between foundational beliefs and conclusions – in non-deductive arguments.

When an uncertain premise comes between foundational beliefs and some conclusion to which it is relevant, either positively or negatively, we ought to regard that premise as a conduit to the conclusion of independent evidence from elsewhere in the probability distribution. The notion of a conduit here is a delicate one in its technical details. But roughly, and speaking only of simple cases, a conduit is a proposition that is epistemically relevant to the conclusion and that, with its negation, “screens off” the probabilistic effect of some other relevant evidence on the conclusion in question. Screening off is a relation of probabilistic independence between two propositions *modulo* some other proposition or its negation. Formally, B screens off E from A just in case

$$P(A|\pm B \ \& \ E) = P(A|\pm B).$$

Take, for example, the proposition that Jesus rose from the dead. Plausibly and on the background evidence we are assuming here, this proposition is a conduit to the proposition that God exists of the evidential force of (say) Peter's assertion that Jesus rose from the dead. If we were given at probability 1 that Jesus rose from the dead, then being given in addition the proposition that Peter said that Jesus rose from the dead would not change the probability of

³⁹For a more detailed discussion of the structure of Plantinga's attempted reconstruction, see McGrew (2004). It was noted there that his D is not entailed by Christianity (p. 13). We note here that his B is also not entailed by Christianity and that even without the record we have in the gospels of Jesus' own teachings while on earth, to which B presumably refers, we would still have other evidence in the other parts of the New Testament, especially Acts and the epistles (combined with the evidence for Jesus' resurrection) for the propositions in G. Hence there would plausibly be a non-negligible probability for the propositions in G even if B were false.

theism. It would add nothing further. Similarly, if we were given with probability 1 that Jesus did not rise from the dead, adding to our evidential corpus the proposition that Peter said Jesus rose from the dead would make no difference to theism. Its evidential impact on theism is exhausted by its support for the proposition that Jesus really did rise from the dead. Moreover, the proposition that Jesus rose from the dead is probabilistically relevant to theism, as is the proposition that Peter said that Jesus rose from the dead. So the proposition that Jesus rose from the dead is a conduit to theism of the evidence of the testimony of the apostles. It is a premise for theism, then, in the sense that it conveys to theism the relevant evidential force of other information.⁴⁰

But we have no stake in denying that theism is also, as a conduit of *other* evidence, a premise for the resurrection and also for Christianity. Theism can be a premise for Christianity both because it is probabilistically relevant to Christianity and because there is independent evidence, relevant to mere theism and also to Christianity, that theism screens off from Christianity. Consider, for example, the specific design argument made by advocates of intelligent design from the origin of life – the argument, say, that the first living cell was probably designed. The existence of God exhausts the relevance to Christianity of the argument from the design of the cell, and in this way the existence of God is a conduit to Christianity of whatever evidential force that argument has. And we can say the same for any evidence provided by the existence of a physical universe as used in, for example, the Kalam cosmological argument. These propositions are evidence for Christianity *by way of* their being evidence for theism. It is correct to say that, in this sense, theism is a premise for the resurrection. The advocate of Christianity should be pleased if there is at least some independent reason to believe theism, as this will raise the prior probability for the resurrection.

There are, then, different lines of evidence both for theism and for the resurrection, and we cannot get a good fix on the probability of either proposition on total evidence unless we consider all of the relevant lines of argument. There is evidence channeled to theism by the resurrection and evidence channeled to the resurrection by theism.

This point is related to the strategy Richard Swinburne follows when he argues for Christianity in stages, discussing, when he comes to miraculous revelations by God, the question of whether there is “other evidence” that would make theism probable (Swinburne, 1992, pp. 69-70). “Other evidence” here means evidence for theism *other than* that which is directly pertinent to some specific revelation and pertinent to theism only by way of its pertinence to the occurrence of that revelatory event. Swinburne’s diachronic or staged argument is one clean way of separating out lines of evidence and avoiding confusion, because each line is brought in by itself and all probabilities are updated each time using Bayes’s Theorem.⁴¹

⁴⁰The strong foundationalist will hold that all uncertain propositions involved in arguments are either conduits or, in more complicated cases, part of a set of propositions that make up a complex conduit “node,” and that the evidential force conveyed by conduit premises to conclusions comes ultimately from certain foundations. (See McGrew and McGrew, 2008.)

⁴¹ But we need to stress that there is no sense in which the different lines of evidence become indistinguishable when all evidence is taken into account and considered synchronically.

All of this helps us to see Plantinga's blunder in trying to bring his PDP to bear on Christianity. Plantinga's focus on the Theorem on Total Probability is central to the whole strategy of the PDP, which can be applied only when the probabilities of all propositions are fixed. Once one allows for updating on new evidence, all bets are off, as a new set of coherent probabilities will be generated every time one updates, and the initial estimate of the probability of theism on some minimal background evidence will constitute no upper bound on the probability of either theism or Christianity after all updates have taken place and all pertinent evidence is taken into account.

There would be nothing wrong with Plantinga's pointing out that the prior probability of theism is relevant to the prior probability of the resurrection. Yet Plantinga is not content to assert this. He resolutely and repeatedly insists that the probability of theism *on total evidence* must be found *first*, before considering the resurrection (Plantinga, 2006, p. 13). He is thus saying that we must find, or at least estimate, the probability of theism on total evidence while deliberately setting aside the pertinent – and possibly very strong – evidence that bears on theism by way of its impact on the resurrection, a procedure nearly guaranteed to give us a probability different from the real probability of theism on total evidence. The only clear-eyed way to proceed when contemplating two mutually relevant propositions is to examine in as much detail as possible the various lines of evidence pertinent, directly or indirectly, to each of them.

Plantinga's most recent argument for such a strategy is unpersuasive:

According to the theorem on total probability

$$P(C/K) = [P(C/K \& T) \times P(T/K)] + [P(C/K \& -T) \times P(-T/K)].$$

If $P(C/K \& -T)$ is very low, the second term on the right side will contribute very little, in which case $P(C/K)$ will be very close to $P(C/K \& T) \times P(T/K)$; and that means that $P(T/K)$ will be close to an upper bound on $P(C/K)$. So suppose you're agnostic about theism; you assign both T and $-T$ a probability of .5; and suppose furthermore you think theism and naturalism are the only real options. Then, even if you think the probability of the resurrection on $K \& T$ is very high .9999, for example, you'll have to assign it a probability close to .5 on K . Under those conditions, once more, we might say that belief in C presupposes belief in T . If so, one couldn't sensibly believe C without believing or at any rate assigning a high probability to T – but not because there is a natural inference from C to T (Plantinga, 2006, p. 14).

This argument has a familiar sound; it is Plantinga's version of the “world-view” objection we considered in the previous section, with the difference that Plantinga's probabilistic formulation attempts to do without any distinction between prior and posterior probabilities and to use only the Theorem on Total Probability. But the only cash value of the argument lies in the formal

Even then, different lines of argument are distinct, because both the screening and relevance relations still hold. This point means, as we shall see, that the PDP is not relevant to the historical argument for Christianity, whether we think of it in diachronic or synchronic terms.

truism that the probability of theism on total evidence sets something close to an upper bound on the probability of the resurrection on total evidence. This means nothing as to whether belief in the resurrection “presupposes” belief in theism or whether, as Plantinga says, “[O]ne must first determine the value of $P(T|K)$, or at least determine that it equals or exceeds some reasonably high probability” (Plantinga, 2006, p. 13).⁴²

Consider how Plantinga’s argument would apply to two other propositions.

A Alvin Plantinga exists.

B Alvin Plantinga sent me an email on March 3, 2007.

Here we can go Plantinga one better, for B entails A, and so the probability of A in a coherent probability distribution sets an absolute upper bound on the probability of B. Let us suppose that, on the morning of March 3, 2007, you have never heard of Alvin Plantinga as a real person, never read any of his books or articles, and have no other specific evidence regarding his existence. Suppose that we attach to the name “Alvin Plantinga” a Russellian definite description like “A philosopher of religion, presently teaching at Notre Dame, who is known for his development of a school of thought known as Reformed Epistemology.” You might be able, with effort, to come up with a probability for A based on extremely general considerations such as whether the first and last names are common or uncommon, how many philosophers there are in the world and at Notre Dame, and the like, but this is all. And the probability you would come up with would plausibly be well below .5, given the specificity of the description.

But on the evening of March 3, you sit down at your computer, access your email, and up comes a note from someone introducing himself as Alvin Plantinga, describing himself more or less as in the definite description, and asking you a question about something or other.

It would be folly to argue for B by first, and without considering B itself, guessing at the final probability of A on total evidence. Why estimate this first, without considering the highly pertinent evidence that you now have that bears on B directly and bears on A by way of B? Who would ever argue for B in this manner under these circumstances? While your vague independent evidence concerning A has bearing on B – on the prior probability of B – the far more powerful argument is the experience of reading the email note itself, and you would naturally and immediately argue for B by considering this direct evidence. Certainly, if Alvin Plantinga does not exist, he cannot be sending you email; but here, apparently, is the note itself.

Beyond the sheer oddity of guessing at the probability of A on total evidence before considering B, it would be a terrible blunder if you actually took as $P(A)$ on total evidence the probability it had in the morning and treated that as an upper bound on the probability for B. This would be flatly wrong, for both A and B must now be reevaluated on the strong evidence

⁴²Nor, though Plantinga attempts once more to attribute this reasoning to Swinburne, is it Swinburne’s reasoning, since what Swinburne considers “first” – as he has made clear repeatedly – is the probability of theism on independent evidence, not on total evidence. (See Swinburne, 2004, pp. 541-2; Swinburne, 2003, pp. 30-31.) Swinburne has also emphasized this point repeatedly, in public at the SCP Pacific Division meeting (Biola University, February, 2004) and in personal communication with us and with Plantinga.

supporting B directly and A indirectly.

So despite the fact that A sets an upper bound on the probability of B and that the prior probability of A influences the prior probability of B, it simply is not true that belief in B “presupposes” belief in A in the sense that the prior probability of A – its probability on the morning of March 3 – must be higher than some particular cut-off for one to believe B on the evening of March 3. Nor does it follow from the fact that B entails A but not vice versa that one must find the probability of A on total evidence before one can consider B.

In most of our interactions with ordinary people, our strongest evidence for their existence is the direct evidence for the things they have done and said – for what we might call their revelations of themselves. A really scrupulous Bayesian might insist on calculating first the prior probability for someone’s existence based on general considerations and then updating it on the more interesting evidence for the person’s actions, but so reflective and careful a Bayesian would never claim that the prior probability was, except by chance, at all like the probability for the person’s existence on *total* evidence. Nor would it be a plausible strategy simply to guess at the final probability of a person’s existence before considering available evidence for some act of his in the world.

In the case of the existence of God, a lot of argumentative action has taken place, both for and against, before we come to consider the resurrection or any other putative miracles or revelations. The logical problem of evil is brought up against God’s existence; the apologist counters with the free will defense. The probabilistic problem of evil is brought up next; the apologist asks for a rigorous formulation and criticizes those given. The apologist brings forward the teleological or the moral or the ontological argument for God’s existence; the skeptic counters. If one has studied this literature at all, or even engaged in late-night dorm-room arguments, one is bound to have some sort of probability for theism independent of the direct evidence for the resurrection. And this probability, whether high, low, or somewhere in the middle, will at least be more definite than is the imagined prior probability for Plantinga’s existence on the morning of March 3.

But none of this argumentative back-and-forth should obscure the fact that all of these arguments concern the evidence about God’s existence *independent* of the direct, historical evidence for the resurrection. Suppose that that evidence is extremely strong, as we have argued. By formal and semantic considerations we can see that it is pertinent to theism. But in that case we shall be far wide of the mark if we try to make a just approximation of the final probability of theism *before* considering the resurrection. And it would be irrational to assume at the outset and before considering the evidence for the resurrection – as Plantinga’s hypothetical agnostic does – that in the final analysis theism will have a probability of .5. Even Plantinga’s supposedly “generous” .9 estimate for the probability of theism on all evidence (Plantinga, 2000, p. 274) is the merest guess and was quite deliberately made without consideration of the actual strength of the independent historical evidence. Who knows, under those conditions, whether it was generous or not? How could one possibly know?

So it becomes evident that there is no “Principle of Dwindling Probabilities” that shows the historical argument for Christianity or for the resurrection to be weak. There is nothing for it but to consider the empirical arguments on their merits.

Knavery, Folly, and the Love of Wonder

In the previous two sections, we have examined two manifestations of what we have called the oblique approach to critiquing the historical argument – the claim that the prior probability for the resurrection is so low that the specific evidence need not be examined and Alvin Plantinga’s attempt to undermine the historical argument by means of the Principle of Dwindling Probabilities. Now we turn to a slightly less abstract approach, one that at least makes reference to some historical matters, in the second part of Hume’s essay.

Though Hume’s treatment in part two is not on quite so abstract a level as the argument of part one, it is still quite general; it consists of little more than an assortment of general considerations and a few examples of alleged miracles designed to cast the evidence for the gospel miracles in an unfavorable light. Most of his objections are not very fully developed, and several of them are derivative, having been exhaustively discussed in the deist controversy over the preceding decades (Burns, 1981). But since the first part of the essay provides no cogent independent line of argument, the success of Hume’s critique rests entirely on the considerations he advances here.

“[I]t is easy to shew,” he writes, “... that there never was a miraculous event established on so full an evidence” as to “amount to an entire proof.” Here he makes four claims that might serve as the premises of arguments:

1. that the witnesses to a miracle (it is clear that he has the apostles in mind) have never been sufficiently credible or numerous and the event has never been done in a prominent enough part of the world;
2. that the passion of surprise and wonder moves people to accept a miracle report in contradiction to their common sense;
3. that reports of miracles “are observed chiefly to abound among ignorant and barbarous nations” but live on in civilized society only because they were handed down from “ignorant and barbarous ancestors”; and
4. that reports of miracles in various opposing religions, if accepted as of equal credit, would cross-cancel each other, leaving all of the competing religious claims equally unsupported.

Neither singly nor taken together do these four considerations do the work Hume claims that they will.

In articulating the first consideration, Hume assures us that

there is not to be found, in all history, any miracle attested by a sufficient number of men, of such unquestioned good sense, education, and learning, as to secure us against all delusion in themselves; of such undoubted integrity, as to place them beyond all suspicion of any design to deceive others; of such credit and reputation in the eyes of

mankind, as to have a great deal to lose in case of their being detected in any falsehood; and at the same time, attesting facts, performed in such a public manner, and in so celebrated a part of the world, as to render the detection unavoidable: All which circumstances are requisite to give us a full assurance in the testimony of men (Hume, 1748, p. 88).

This is a bald assertion, question begging if taken at face value. The orthodox opponents of the deists were quite familiar with such objections and had argued at length and with force that the testimony of the apostles met every reasonable standard of evidence one could require.

Responding to Annet's skeptical attack on Sherlock's *Tryal*, Samuel Chandler writes:

[A]ll the Characters of Integrity appear in these Writers, that can possibly be demanded or desired. The very Inconsistencies that at first View they seem to be chargeable with, shew at least there was no Contrivance amongst them, to deceive others. They make no Scruple to tell us, that the first Appearances of Christ were to a few Women, with whose single Testimony they well knew the World would be far from being satisfied. They seem to have concealed no Circumstances of Christ's Appearances, however exceptionable they might possibly be in some Mens Opinion and Judgment. They plainly assure us, that the Disciples imagin'd the first Accounts of the Resurrection, to be mere Dreams and Tales, and unsupported imaginations, and were not in the least disposed to receive or credit them. It doth not appear that they could have any present Interests to answer, by the Accounts they gave, if they had not known them to be true; or that they were set on to write them by Persons, who either could reward them, or receive themselves any worldly Advantages from the Publication of those Accounts to others. . . .

Now though 'tis scarce possible to conceive how any one Person could be deceived in the Proof that was given of the Resurrection, yet were they all deceived? What, was there not one of the Apostles, not one of those who were with them, not one of the Hundred and Twenty, or Five Hundred, that had Eyes to see, or Ears to hear, or Hands to feel, or Judgment to discern? Were they all deluded with a fantastick Appearance, and the Senses of such a Variety of Persons all absolutely imposed on, and deceived? What Credibility is there in such a Supposition? Or did they all agree to support a Lye, a known Lye, an incredible, obnoxious, and dangerous Lye? A few might have kept the important Secret, had the whole Affair been a Fraud. But could such a Secret ever be preserved where so large a Number was privy to it? Were they so steady and true to a Falsehood, as that neither Interest nor Persecution could move them to discover it? (Chandler, 1744, pp. 133, 141-2)

Notably, Chandler makes these remarks only in summary after he has spent more than a hundred pages surveying and addressing the objections of adversaries to the credibility of the Gospel account of the resurrection and the character of the witnesses in particular. And this is only one of the works in which Chandler develops the historical argument. Measured against this standard, Hume's bare assertion counts for nothing.

The second and third *a posteriori* considerations are similarly derivative and ineffective.

Hume sketches the second in these words:

[W]hen anything is affirmed utterly absurd and miraculous, [the mind] rather the more readily admits of such a fact, upon account of that very circumstance, which ought to destroy all its authority. The passion of surprise and wonder, arising from miracles, being an agreeable emotion, gives a sensible tendency towards the belief of those events, from which it is derived. And this goes so far, that even those who cannot enjoy this pleasure immediately, nor can believe those miraculous events, of which they are informed, yet love to partake of the satisfaction at second-hand or by rebound, and place a pride and delight in exciting the admiration of others (Hume, 1748, pp. 88-89).

In this bit of armchair psychologizing, Hume had been anticipated by Thomas Morgan:

Men are the more easily imposed on in such Matters, as they love to gratify the Passion of *Admiration*, and take a great deal of Pleasure in hearing or telling of Wonders (Morgan, 1738, p. 31).

But as a criticism of the resurrection, this banal observation is too blunt an instrument to do any damage. The love of wonder may cause people to listen eagerly to the wild tales of travelers, but as John Gorham Palfrey notes in his Lowell Lectures, there is a limit to what may be explained by this principle; everyone knows for himself that it would not be sufficient to make him accept such a story as the resurrection

without inquiry and full proof, when the consequence would be, as unquestionably it was with the early Christians, that he must devote himself to a new course of life, relinquish old friendships and associations, undertake unaccustomed labors, and face a host of appalling dangers (Palfrey, 1843, pp. 293-94).

As for Hume's third consideration, the claim that miracles are readily received among the barbarous had been made by the deist John Toland in his work *Christianity not Mysterious*, and in the very words that Hume was to borrow:

[i]t is very observable, that the more ignorant and barbarous any People remain, you shall find 'em most abound with Tales of this nature ... (Toland, 1702, p. 148).

But to call first century Judaism "ignorant and barbarous" would be itself historically ignorant, and to suggest that this absolves us of taking the testimony of the eyewitnesses seriously is a classic example of trying to dismiss evidence without doing any actual argumentative work. Nor was first century Judea, which had been a Greek possession for three centuries before the Romans took charge of it, such a backwater as Hume would have his readers suppose.

In order to overcome the arguments advanced in detail by writers like Chandler, Jacob Vernet, Thomas Stackhouse, Thomas Sherlock, John Leland, and Nathaniel Lardner, Hume

would have had to descend into the fray and sort through the evidence. This was a trial that he was by no means fitted to endure. Instead, as John Earman writes,

Hume pretends to stand on philosophical high ground, hurling down thunderbolts against miracle stories. . . . When Hume leaves the philosophical high ground to evaluate particular miracle stories, his discussion is superficial and certainly does not do justice to the extensive and vigorous debate about miracles that had been raging for several decades in Britain (Earman, 2000, p. 70).

Earman's judgment is proved correct when we look at Hume's fourth consideration, where he discusses actual miracle stories in an attempt to show that all miracle claims are on a par and are alike unsupported. Setting believers in miracles by the ears was a favorite tactic of many of the deists (Burns, 1981, pp. 72-75). At the beginning of the deist controversy Charles Leslie had already proposed four marks by which genuine miracles might be distinguished from spurious ones; and throughout the whole of the deist controversy both before and after Hume there was, among the Protestants, a vigorous industry elaborating the means for separating out the apostolic wheat from the Papistical chaff.

Hume uses the trope of setting religious believers against one another to force an implicit dilemma upon the Christian apologist: Either accept all of these miracle stories as true or abandon belief in the resurrection of Jesus Christ. The first option will be unpalatable to the English Protestant apologists because the miracle story in question arises from some pagan religion, because it arises in Roman Catholicism, or because the story appears manifestly fraudulent.

But in pressing this line of argument, Hume refrains from responding to the actual evidence put forward in favor of the miracles of the gospels, and the resurrection in particular, and instead focuses attention on an entirely different set of miracles which he expects his reader to find implausible. His critics were not slow in pointing out the evasion, but none put the point more vigorously than Peter Bayne:

"When any one," proceeds Hume, "tells me that he saw a dead man restored to life, I immediately consider with myself whether it be more probable that this person should either deceive or be deceived, or that the fact which he relates should really have happened. I weigh the one miracle against the other; and according to the superiority which I discover, I pronounce my decision, and always reject the greater miracle. If the falsehood of his testimony would be more miraculous than the event which he relates, then, and not till then, can he pretend to demand my belief or opinion."

Exactly; no statement could be more reasonable. Let us proceed, then, to the comparison. The Christian has to produce testimony to miracle whose falsehood would be a mightier wonder than the miracle attested, and Hume has to weigh miracle against miracle.

What was the next step to be taken in Hume's argument? What did his own statement require him to do? Clearly, to take up the miracles which Christians allege to be true; to set their evidence fully and distinctly forth; and to point out that, however

plausible that evidence might be, its fallaciousness would be no miracle compared with the miracle it affirmed. This, I say, is what the law on the case, as laid down by Hume, required; this is what, in his own court of evidence, Hume prescribed.

But every reader of Hume's *Essay* knows that he has done nothing of the sort. The nature of the evidence required for the Christian miracles once fairly stated, those miracles are quietly put by him out of court. The trial proceeds by proxy. Hume does not ask what proof is offered that the Christian miracles took place; he calls to the bar certain "miracles" with which Christianity has nothing to do, enters upon their evidence, condemns them as falsities, and then calmly informs the court that the Christian miracles are disproven. Vespasian, according to Tacitus, performed two miraculous cures; the Cardinal de Retz mentions a "miracle" of the reality of which he was assured; and sundry prodigies are said to have taken place at the grave of the Abbe Paris. These last, Hume informs us, "might, with some appearance of reason, be said to surpass in evidence and authority" the miracles of the Saviour. But it is really too much to ask us to take his judgment in such a case. Our folly would be unexampled and inconceivable if we did not insist on putting aside his instances of miracle, and claiming what he has himself accorded us, the right to select a crucial instance of our own (Bayne, 1862, pp. 26-27).

What can be said on behalf of Hume's strategy of trial by proxy – substituting these other miracle stories for the resurrection? Formally speaking, the cross-cancellation argument requires too many dubious assumptions to be cogent (Earman, 2000, pp. 67-70). But setting aside Hume's rather confused remarks about cross-cancellation, an examination of pagan and ecclesiastical miracle reports would have bearing on the credibility of the resurrection provided that two unspoken premises could be established: 1) that the evidence for these alternative miracles is in every way equal or superior to that for the resurrection, and 2) that the events thus reported are not worthy of credit.

Hume's rhetoric does, indirectly, suggest that he wants to endorse both claims, though he never supports either with a direct argument, and it would be impossible to support the first without considering the evidence for the resurrection directly. And Hume's presentation of the pagan and recent Catholic miracles suggests that he wanted to claim that they met criteria that Christians must endorse for genuine miracles. But William Adams, John Douglas, and George Campbell were more than willing to descend to particulars and to enquire more closely than Hume had into the very examples he had put forward. They had no difficulty showing that the first suppressed premise of Hume's inexplicit argument was undermined by his own one-sided scholarship, selective reporting, and the occasional outright bluff.

Hume's first purported parallel concerns the cures of Vespasian.

One of the best attested miracles in all profane history, is that which Tacitus reports of Vespasian, who cured a blind man in Alexandria, by means of his spittle, and a lame man by the mere touch of his foot; in obedience to a vision of the god Serapis, who had enjoined them to have recourse to the Emperor, for these miraculous cures. The story may be seen in that fine historian; where every circumstance seems to add weight to the testimony, and might be displayed at large with all the force of argument and eloquence,

if any one were now concerned to enforce the evidence of that exploded and idolatrous superstition. The gravity, solidity, age, and probity of so great an emperor, who, through the whole course of his life, conversed in a familiar manner with his friends and courtiers, and never affected those extraordinary airs of divinity assumed by Alexander and Demetrius. The historian, a cotemporary writer, noted for candour and veracity, and withal, the greatest and most penetrating genius, perhaps, of all antiquity; and so free from any tendency to credulity, that he even lies under the contrary imputation, of atheism and profaneness: The persons, from whose authority he related the miracle, of established character for judgement and veracity, as we may well presume; eye-witnesses of the fact, and confirming their testimony, after the Flavian family was despoiled of the empire, and could no longer give any reward, as the price of a lie. *Utrumque, qui interfuerent, nunc quoque memorant, postquam nullum mendacio pretium.* To which if we add the public nature of the facts, as related, it will appear, that no evidence can well be supposed stronger for so gross and so palpable a falsehood (Hume, 1748, p. 92).

Hume's presentation here is so careless that it struck his opponents as disingenuous. The "candour and veracity" of the historian are beside the point, since the manner in which Tacitus introduces the story indicates plainly that he disbelieved it. Hume's characterization of the persons on whose authority Tacitus relied in relating the miracle as "of established character for judgement and veracity, as we may presume" drew special scorn from Campbell, for Tacitus says nothing of the sort (Campbell, 1839, p. 98).

The entire affair bears on its face the marks of obvious imposture. It was conducted in Alexandria, the first major city to declare in favor of Vespasian's imperial aspirations, and it was done in honor both of the emperor, for whom a divine sign would be most convenient, and of the local deity. At Vespasian's request, physicians examined the two men who claimed to have received visions in the night telling them to appeal to Vespasian to be cured; the physicians reported that the blind man was not totally blind, nor the lame man totally lame, and added that any glory for a successful cure would redound to Vespasian himself, while any blame for a failure would fall back upon the two supplicants for having fraudulently represented the oracle of Serapis. The Egyptian populace, whom Tacitus describes in this context as "a people addicted to superstition," were hardly apt to be critical. "Where, then," asks Adams,

is the wonder that two men should be instructed to act the part of lame and blind, when they were sure of succeeding in the fraud, and of being well rewarded (*as we may well suppose*) for their pains? (Adams, 1767, p. 78)

As for Tacitus's reference to living witnesses, there is no mystery here. If the fraud was perpetrated publically as described, there were doubtless many people who saw the two men leap up and claim to have been healed. There is no need to suggest that the witnesses were liars; it suffices that they were at most somewhat credulous. There was no need for them to inquire too closely since – unlike the apostles – they had absolutely nothing to lose in maintaining their account of what they had seen. "No evidence," Douglas concludes drily, inverting Hume's claim, "can well be supposed weaker" (Douglas, 1757, p. 99).

At every point, the case of Vespasian differs critically from that of the resurrection. Indeed, from a Bayesian point of view, the wonder would be if, under the circumstances, some story of a miraculous demonstration in favor of Vespasian were *not* forthcoming. Given our background knowledge, the Bayes factor for the testimony is so close to 1 as to give us virtually no epistemic traction: the report was almost as strongly to be expected if the two men had been parties to the deceit as if they had genuinely been healed. It is absurd to suggest that the evidence for these miracles bears comparison with the evidence for the resurrection.

We might well leave the story of Vespasian here, were it not for one more curious point. For the two cures mentioned seem to have been suggested by two reported in the gospel of Mark; in particular, the use of spittle to anoint the eyes of a blind man bears a striking resemblance to the cure at Bethsaida recounted in Mark 8:23. If so, the whole affair supports the ancient tradition, found in Eusebius, Epiphanius, and Jerome, that Mark published copies of his gospel at Alexandria. The publication would have had to be at least a few years prior to Vespasian's arrival there c. A.D. 69. Thus Hume's example turns under his hand in a way that he could not have anticipated. The very similarity between the cures attributed to Vespasian and those of Christ lends additional support to the claim that the gospel accounts were published much earlier than skeptical biblical scholarship would like to allow.

Hume's second example is another account of a cure worked among the faithful, but for his third he takes a case where the reported miracles were unwelcome to a powerful and influential party. Hume tacitly suggests that these reported miracles meet a standard of evidence similar to that of the resurrection – namely, that the reports could not be refuted by contemporaries with a motive for challenging them. His attempt to force the Christian apologist to take all or leave all is particularly evident here:

There surely never was a greater number of miracles ascribed to one person, than those, which were lately said to have been wrought in FRANCE upon the tomb of Abbé PARIS, the famous Jansenist, with whose sanctity the people were so long deluded. The curing of the sick, giving hearing to the deaf, and sight to the blind, were every where talked of as the usual effects of that holy sepulchre. But what is more extraordinary; many of the miracles were immediately proved upon the spot, before judges of unquestioned integrity, attested by witnesses of credit and distinction, in a learned age, and on the most eminent theatre that is now in the world. Nor is this all: A relation of them was published and dispersed every where; nor were the JESUITS, though a learned body, supported by the civil magistrate, and determined enemies to those opinions, in whose favour the miracles were said to have been wrought, ever able distinctly to refute or detect them. Where shall we find such a number of circumstances, agreeing to the corroboration of one fact? And what have we to oppose to such a cloud of witnesses, but the absolute impossibility or miraculous nature of the events, which they relate? And this surely, in the eyes of all reasonable people, will alone be regarded as a sufficient refutation (Hume, 1748, pp. 93-94).

Part of what Hume says here is true. The Jansenists, a large Catholic splinter group who had fallen sharply out of favor with Rome in the decades leading up to the death of the Abbé

Paris in 1727, were in desperate need of a sign from heaven of the rightness of their cause against the Jesuits; accordingly, numerous cures – and even more numerous convulsions – were reported to have taken place at the tomb of the Abbé. But the claim that the reports were not refuted is demonstrably false, and its presence in the first edition is excusable only on the assumption that Hume, who was working chiefly from a book by Louis Basile Carré de Montgeron, was unaware of the fact that many of Montgeron’s claims had been refuted in the pastoral letter of the Archbishop of Sens.

If ignorance was the cause of Hume’s error, he soon had the means to put it right, for his antagonists took the trouble to consult the literature on the controversy and provided a full account of multiple frauds perpetrated in the name of the Abbé. The “miraculous” cure of the Sieur le Doulx, for example, was detected by the recovered patient himself, who in a letter to the Bishop of Laon explained that the Jansenist convent of St. Hilaire had pressed a confessor and the sacraments upon him when he was in bed with the fever, which gave an unwarranted air of gravity to his condition. The widow de Lorme, who was ostensibly smitten with palsy for having gone to the tomb of the Abbé with intent to ridicule, confessed herself that it was a contrivance (Douglas, 1757, p. 129). Anne le Franc, who was said to have been cured, *inter alia*, of a disorder in her eyes, turned out never to have had anything wrong with them; five notarized certificates to her cure were testified, by the signatories themselves, to have been tampered with after the signing (Adams, 1767, pp. 85-86). Montgeron celebrates the recovery of Don Alphonso, whose eye had been inflamed. But the certificates collected by Montgeron himself show that, just prior to his trip to the tomb of the Abbé, the young man had begun using a medicine prescribed by the eminent oculist Dr. St. Yves (Douglas, 1757, pp. 141-43). Examples of this sort, all detected by the Archbishop of Sens, can be multiplied *ad nauseam*.

Had the love of truth overpowered Hume’s love of literary fame, he might have withdrawn the example in subsequent editions of his work or at least mentioned the contrary evidence provided by the Archbishop of Sens. But he did neither. Instead, he inserted a lengthy footnote into the second edition claiming that many of the miracles were “proved immediately by witnesses before the officiality or bishop’s court at PARIS, under the eye of Cardinal NOAILLES, whose character for integrity and capacity was never challenged, even by his enemies” (Hume, 1748, p. 94). This reference to the character and capacity of the Cardinal is another piece of misdirection. The only signatories to the petition were the twenty-two curés who presented it to Cardinal Noailles, and the Cardinal rejected the petition on the grounds of palpable falsehoods proved upon the witnesses *par des informations juridiques* (Adams, 1767, p. 89). In the same footnote Hume claims that the successor to Cardinal Noailles, though pressed by twenty-two curés of Paris to examine the miracles, “wisely forbore” (Hume, 1748, p. 94). This was yet another blunder: Charles-Gaspard de Ventimille, who succeeded Cardinal Noailles as Archbishop of Paris, ordered a public judicial inquest into the miracles and published the results on November 8, 1735, in what Adams describes as “an ordonnance” containing “convincing proofs, that the miracles, so strongly warranted by these curés, were forged and counterfeited” (Adams, 1767, pp. 88-89).

From the fact that many of the cures were shown upon examination to be frauds, it does not follow that no one recovered from an illness after a visit to the Abbé’s tomb. But as Adams points out, some recoveries are not particularly surprising:

[T]he same, I dare pronounce, would happen, if a thousand people, taken at a venture, were at any time removed from their sick chambers in *London* to *St. Paul's Churchyard* or the *Park*, especially if they went with any strong hope of a cure: in such a number, some are always upon the point of recovery — many only want to fancy themselves well — others may be flattered for a time into this belief, while they are ill — and many more, by fresh air and motion, and especially by forbearing the use of other means, will find a change for the better: but, that the blind received their sight, or the deaf were restored to hearing, by these visits, I deny that we have any competent or tolerable evidence (Adams, 1767, pp. 83-84).

Had the cures reported at the tomb of the Abbé Paris lived up to the characterization Hume gives of them, there would indeed be reason to believe that they had taken place. But they do not; and Hume never acknowledged, in any of the successive editions of his essay published in his lifetime, the numerous factual errors that critics like Adams, Douglas, and Campbell had pointed out in his presentation.

Throughout part two of his essay, Hume unintentionally illustrates the truth of his own observation:

[E]loquence, when at its highest pitch, leaves little room for reason or reflection; but addressing itself entirely to the fancy or the affections, captivates the willing hearers, and subdues their understanding (Hume, 1748, p. 89).

Certainly Hume's own eloquence has had that effect on many of his readers who, perhaps because they find his conclusions congenial, have accepted and recounted his accounts of the cures of Vespasian and the transactions at the tomb of the Abbe Paris without making even a modest attempt to verify his claims. What is worse, Hume seems to have forgotten his own sensible observation from the end of the *Enquiry* that "there is a degree of doubt, and caution, and modesty, which, in all kinds of scrutiny and decision, ought for ever to accompany a just reasoner" (Hume, 1748, p. 120).

The trouble with the arguments in the second part of Hume's essay is not merely that they are unoriginal, nor is it simply that part two is, soberly considered, a very superficial treatment of issues that had already been addressed in vastly greater detail by the defenders of Christianity. It is above all that Hume resolutely refuses to come to grips with the historical evidence for the resurrection, despite the fact that this is the one miracle claim he absolutely must undermine if his essay is to be a significant contribution to the discussion. To substitute an examination of reports of other miracles, and to insinuate without argument that these others are as well-attested as the central miracle of Christianity, is mere clever misdirection; to misrepresent the facts in the attempt to improve the parallel is irresponsible — or worse. Such substitutes for argument do not constitute a serious challenge to the credibility either of the resurrection or of Christianity itself.

Conclusion

Although we have offered a cumulative case for the resurrection, we make no pretense to

have offered the whole of the case, much less the whole of the case for Christianity. We have focused on those facts we consider most salient, but the argument can be elaborated in numerous ways: buttressing assumptions, deflating or deflecting criticisms, and taking additional facts into account. Ultimately, it can be embedded in a comprehensive argument that marshals all the resources of natural theology.

Yet as Butler points out in the *Analogy of Religion*, the argument from miracles is one of the direct and fundamental proofs; no competent presentation of the evidence for theism can afford to omit it or to treat Hume's essay as the final word on the subject. Hume could not himself be bothered to descend into the fray and discuss the argument in detail. But philosophers who wish to evaluate the evidence provided by testimony to the miraculous must move beyond this shallow treatment and come to terms with the argument in its most plausible and persuasive form, following Bacon's wise advice "to examine things to the bottom; and not to receive upon credit, or reject upon improbabilities, until there hath passed a due examination" (Bacon, 1862, p. 124).⁴³

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