

## RESPONSE TO PLANTINGA'S ARGUMENT FROM "DWINDLING PROBABILITIES"

The objection from "dwindling probabilities" is the name given by Alvin Plantinga to what he sees as a major difficulty in the way of producing cogent historical arguments for the truth of the central elements of Christian doctrine<sup>1</sup> (G), a problem which he finds in my own attempt to do so in my book Revelation.<sup>2</sup> In order to pursue ramified natural theology, Plantinga claims correctly, we need first bare natural theology to argue for the existence of God (T) on the basis of all our background knowledge (K) ("the totality of what we know apart from theism"). And Plantinga seems to acknowledge that arguments from background knowledge accepted by theist and atheist alike (presumably the "we" to whom he refers) will be probabilistic. They will show that there is some probability on that evidence that there is a God –  $P(T/K)$ ; I argued elsewhere that that value is more than 0.5. Then, as Plantinga represents my style of argument, we must consider the probability, given (T&K), that (A) "God would make some kind of revelation ... to humankind" –  $P(A/T\&K)$ . But we then need to argue that "such a revelation would contain G"; and Plantinga suggests one way to do this is to ask for the probability of (B), "Jesus's teachings were such that they could be sensibly interpreted and extrapolated to G", given (K&T&A) – that is  $P(B/K\&T\&A)$ . But why suppose the teachings are true? Perhaps K plus what has been established so far makes it probable that (C) "Jesus rose from the dead" –  $P(C/K\&T\&A\&B)$ . And maybe it is probable, given all that, that (D) "In raising Jesus from the dead, God endorsed his teachings". But was he endorsing the extrapolation of those teachings to G? Perhaps it is probable that (E), "Jesus founded a church to interpret his teaching, and that that church which is still extant teaches G, and God preserves it from error." So call the probability that God endorsed the extrapolation of Jesus's teachings in this way, given the previous evidence,  $P(E/K\&T\&A\&B\&C\&D)$ . But to get the probability that G is true by this route on the only evidence we have (K), it is necessary to multiply these probabilities together:  $P(E/K) = P(T/K) P(A/T\&K) P(B/T\&K\&A) P(C/K\&T\&A\&B) P(D/K\&T\&A\&B\&C) P(E/K\&T\&A\&B\&C\&D)$ . Since E entails G, Plantinga seems to suppose, the probability of G ( $P(G/K)$ ) can be taken as tantamount to  $P(E/K)$ . At each stage of multiplication, there

will be a diminution of probability. Each individual probability may be quite high; and Plantinga suggests for these probabilities values which he regards as “generous” around 0.8 or 0.9. If we multiply together the particular values suggested by Plantinga for these individual probabilities, we get a value for the resulting probability of 0.35. So the attempt to establish G by historical argument cannot give it a very high probability, not at all the kind of probability we need if we are “to know the great truths of the gospel”.<sup>3</sup>

Now, strictly speaking – as Plantinga acknowledges, but takes no further –  $P(G/K)$  is the sum of the probabilities of the different routes to it. G might be true without some of these intermediate propositions being true. For any h, e and k,  $P(h/k) = P(h/e \& k) P(e/k) + P(h/\sim e \& k) P(\sim e/k)$ .  $P(h/e \& k)$  may be much larger than  $P(h/\sim e \& k)$ , and  $P(e/k)$  may be much larger than  $P(\sim e/k)$ , and so to simplify my argument from k to h, I may say “k, therefore probably e; e, therefore probably h”, and the probability accruing to h by this route will be  $P(h/e \& k) P(e/k)$ . But to get an accurate value for  $P(h/k)$ , the lesser probabilities must be added in; there is some low probability that, given k, e may be false; and some low probability that even if e is false, h is still true. Hence Plantinga rightly says that  $P(G/K)$  is “equal to or greater than” the value obtained by multiplying the probabilities along the line of argument which he discusses. And if the probabilities along the other routes from K to G are significant, they could make a significant difference to the overall probability. Maybe for example, in raising Jesus from the dead, God was not endorsing his teaching – so not-D; but God was endorsing only the teaching of the church which Jesus founded, although what it taught was not a sensible extrapolation from Jesus’s teachings (and so not-B). Maybe this is not very probable, but to get the overall value of  $P(G/K)$  we need to add in the value of the probability of G along the route  $K \rightarrow T \rightarrow A \rightarrow \text{not } -B \rightarrow C \rightarrow \text{not } -D \rightarrow E \rightarrow G$ . As it is, Plantinga’s resultant value in fact assesses the probability on K of the whole conjunction (G&E&T&A&B&C&D), which will (by a theorem of the calculus) inevitably be (no greater than and normally) less than the probability of any one or lesser number of conjuncts on the same evidence. The more you say, the more you are likely to make a

mistake. Yet G may be true without some of these conjuncts being true. In this particular example the issue becomes complicated in virtue of the fact that some of the conjuncts (E&T&A&B&C&D) are themselves part of G – that “Jesus rose from the dead” (C) is itself one of the “great truths of the Gospel”. The more such conjuncts there is, the greater is the probability given those conjuncts, of G (for this element of G will already have been proved). But some of the conjuncts are not part of G and so my general point remains that the probabilities will not dwindle as rapidly as Plantinga’s long discussion might lead the unwary reader to suppose; and his formal acknowledgement of this point should be given more attention. There will never be an increase in probability if we consider all the different routes to the conclusion, but the diminution of probability may well be significantly less.

A defender of the argument from dwindling probabilities may acknowledge this point, but emphasize that all the same the longer the route of the argument (or the more conjuncts involved in the conclusion), the less probable is the conclusion; and so suggest that it is not plausible to suppose that an argument of any length would yield a very probable conclusion. In rebuttal I make two points. The first is that the argument from dwindling probabilities applies, in so far as it does apply, not only to theological arguments, but to any argument of some length in history or science (or to any conjunction of propositions in these areas). Yet surely in these areas we can reach conclusions which are very probable.

Suppose I take a random sample of 90 out of 100 widgets and find that they are all red (k). What is the probability that all 100 will be red (h). One would suppose that  $P(h/k)$  would be high; 0.9 would surely be a reasonable estimate. But this probability is the probability that, given k, the 91<sup>st</sup> widget will be red ( $e_{91}$ ) times the probability given (k and  $e_{91}$ ) that the 92<sup>nd</sup> widget will be red ( $e_{92}$ ) times the probability given (k and  $e_{91}$  and  $e_{92}$ ) that the 93<sup>rd</sup> widget will be red, and so on. For  $P(h/k)$  to equal 0.9, each of these intermediate probabilities will have to average more than 0.98. So sometimes intermediate probabilities may be very high indeed. (In this example, since all the intermediate propositions are themselves conjuncts of the resulting conclusion, k; there is no ‘or greater than’ to be

added to the 'equal to'. I noted above that some (but not all) of the intermediate propositions of the argument for G are themselves part of G.). Intermediate probabilities will be very high to the extent to which the intermediate propositions fit very well together with k and with each other.

Or consider a single page of a serious work of history, about the life of Julius Caesar for example, containing many propositions. On the same evidence, the first proposition will be more probable than the conjunction of the first and the second, and that will be more probable than the conjunction of the first, second, and third and so on. What is the probability that every proposition on the page is true? It will certainly be less on the same evidence than the probability that the first one is true. But whether the difference is significant or not depends on what the evidence is, what the historical propositions are and how well they fit together. No worthwhile general point can be made. If the author uses some of these propositions as evidence for others, then again the former will be more probable than the conjunction of the former with the latter. But again everything depends on the details; and surely many reputable historical works have pages on which all their assertions are highly probable on the evidence adduced by the author.

My second point against the significance of "dwindling probabilities" is to note that the "dwindling" arises from the fact that in Plantinga's discussion he supposes that all the evidence is put on the table at the beginning. K is supposed to be all evidence relevant not merely to T, but to C and D and so on. And so the dwindling arises from the fact that as you add to the hypothesis more conjuncts (as Plantinga does in effect when he considers only the main line of argument to the conclusion), the theorem of the calculus again applies that the probability of a conjunction on some evidence is never greater than (and normally less than) the probability of a smaller number of the conjuncts on the same evidence. But the force of evidence may often be better appreciated if we do not put all our evidence on the table at the beginning; and instead as we add each conjunct to the hypothesis, we also add a new piece of evidence. In this way the probability may increase, not decrease.  $P(p\&q/r\&s)$  may be greater or less than  $P(p/r)$  – it all depends what are the conjuncts of the hypothesis and of the evidence.

In the first edition of my book *Revelation*, I did pursue the policy of feeding in the evidence gradually – contrary to the account which Plantinga gives of what I was doing. I began by alluding to a result which I claimed to have established elsewhere, that “there is an all-powerful and all-good God”.<sup>4</sup> I then went on to argue that “there is good a priori reason for expecting a propositional revelation, in connection with an atoning incarnation; and for expecting some means to be provided for pursuing and rightly interpreting that revelation for new centuries and cultures.”<sup>5</sup> I then claimed that further historical evidence made it fairly probable in outline what Jesus taught;<sup>6</sup> that he founded a church<sup>7</sup>; and that he announced that his life and death constituted an atonement for our sin.<sup>8</sup> I suggested also<sup>9</sup> that there was some evidence of witnesses (to the empty tomb and the appearances of Jesus) to a super-miracle (of the Resurrection) – though I explicitly did not give that evidence there. I claimed that there was historical evidence<sup>10</sup> that the first recipients of reports of the Resurrection, the Jews, would naturally construe it as God’s signature on the teaching of Jesus. I went on to claim<sup>11</sup> that by normal criteria of identifying a continuing society – continuity of aim (which in the case of the church includes continuity of doctrine), and continuity of organisation – there was good historical evidence that the Christian church (conceived very broadly as including Roman Catholicism, Orthodoxy, and Protestantism) on the whole preserved these features. So at each stage of the argument new historical evidence was introduced. I acknowledge however that I did not bring out what was going on with the aid of the probability calculus<sup>12</sup>. But I do so here.

In my more recent book *The Resurrection of God Incarnate* I have made the probabilistic structure of my arguments much clearer. I begin by drawing attention to my argument elsewhere from the evidence of natural theology (k) to the existence of God (t), and I repeat my claim that  $P(t/k) > \frac{1}{2}$ ; though in order not to seem to exaggerate the force of this evidence I suggested that we suppose only that  $P(t/k) = \frac{1}{2}$ . There is then in effect an argument to the conjunction of the Incarnation of God in Jesus (d)<sup>13</sup> and his Resurrection (h) from k and the combined historical data of the evidence of the life of Jesus (e<sub>1</sub>), the testimony of witnesses to the empty tomb and his post-Resurrection appearances (e<sub>3</sub>),

and the evidence that no other known prophet in human history led the right kind of life which ended in the right kind of way with a super-miracle such as the Resurrection ( $e_2$ ). Taking  $e = (e_1, e_2, e_3)$  and noting that  $d$  entails  $t$ , I claim that  $P(t \& h \& d / k \& e) > P(t / k)$ . I won't go through the details of the argument here, but suffice it to say that everything turns on  $e$  being very improbable given  $\text{not-}t$ . This argument, as so expressed, is evidently and in a way made explicit by the formalism not subject to the "dwindling probabilities" objection, because the evidence is fed in in two separate stages. Of course if I had put all the evidence on the table at the beginning, then probabilities would have diminished  $P(t / k \& e) > P(t \& h \& d / k \& e)$ . But if the detailed formalized argument of The Resurrection of God Incarnate with its suggested input probabilities which gives a very high value to  $P(t \& h \& d / k \& e)$  is correct, the "dwindling" is irrelevant. Most of the "great truths of the Gospel" are either entailed by or rendered highly probable by  $(t \& h \& d)$ , and so the argument is well on the way to the conclusion of the unformalized argument of Revelation. A critic should focus his criticism on the details of arguments for a ramified theism rather than rely on the "principle of dwindling probabilities".

- 1 Alvin Plantinga, Warranted Christian Belief, Oxford University Press, 2000, pp. 272-80.
- 2.. Richard Swinburne, Revelation. From Metaphor to Analogy, Clarendon Press, 1992, chs 5, 6, 7 & 8.
3. Plantinga, op. cit. p. 280.
4. *Revelation* pp. 69-70.
5. op. cit. p. 83.
6. op. cit. p. 106.
7. op. cit. p. 107.
8. op. cit. p. 109.
9. op. cit. p. 112-13.
- 10 op. cit. p. 111-12.

11. op. cit. ch 8. Plantinga notes (*Warranted Christian Belief*, p. 278 n 70) that to apply the criterion of “continuity of doctrinal teaching” we would have to know already “what Jesus intended his church to teach, but then we can’t use this test to determine what Jesus intended his church to teach.” True, but that is no objection to my strategy, since I claimed (see above) that we have independent historical evidence about what Jesus taught and so intended his church to teach. This evidence may not be sufficient to establish the latter, but it is enough to rule out from satisfying both tests some resulting societies which preserve continuity of organization with the original church. And evidence about the extent of continuity of organization may suffice to rule out other resulting societies as proper interpreters of what Jesus taught.

12. I have articulated the probabilistic structure of the argument in a more formal way in an Appendix to a forthcoming second edition of *Revelation*.

13. I set out the argument of the book here in a highly condensed form which nevertheless brings out its essential features. In the Appendix entitled “Formalizing the Argument” ‘d’ does not appear; instead there is ‘c’, ‘God becomes Incarnate’. But I also claim (p. 214) that “given (e&k) and c ... it would be immensely improbable that the Incarnation took place or will take place in any prophet except Jesus”. (“Immensely” is not italicised in the original).

\*This response to Plantinga is taken from a paper ‘Natural Theology, Its “Dwindling Probabilities”, and “Lack of Rapport”’, *Faith and Philosophy*, 21 (2004), 533-46. I have updated the references.