

Christians in Science Summer 2012 Student Essay Competition

First Place Essay

Miracles in the Blind Spot

Sebastian Wood, August 2012

The other conversations at the dinner table lulled as my new acquaintance burst out indignantly, "You don't *seriously* believe that Jesus' mother was a virgin, do you?!" Once it emerged that I was a Christian, my research colleague seemed to have taken offence. He could not understand how I could call myself a scientist and yet readily accept the Biblical accounts of miracles upon which my faith is based.

The whole situation was socially very embarrassing, but for me it raised a deeper issue as I reflected on the experience: why *was* I willing to accept the Biblical miracles when I would certainly demand much stronger evidence if somebody made a comparable claim today? If a friend said that they had seen water turn instantly into wine I should want to see video recordings, chemical analyses, and a rigorous account of the experimental conditions. Yet I would staunchly defend the reliability of the account in John's Gospel where Jesus performed that same miracle even though no supporting information was supplied.^[1] Richard Dawkins makes a scathing diagnosis of my situation:

When pressed, many educated Christians are too loyal to deny the virgin birth and the resurrection. But it embarrasses them because their rational minds know that it is absurd, so they would much rather not be asked.^[2]

I should make clear at this point that I am thinking of the spectacular type of miracle which Hume describes as 'a violation of the laws of nature'^[3] rather than the coincidences and improbable events, which may also be interpreted as miracles but cause little discomfort to scientists. The problem with miracles is a lack of scientific evidence. Anecdotally there seems to be no shortage of people claiming to have witnessed miracles, but to convince a scientist we need something stronger: data, artefacts and controlled conditions. Hume describes the reports of miracles he encountered in characteristically 18th century terms:

"they are observed chiefly to abound among ignorant and barbarous nations"^[3]

We might want to reword it for today but his point remains: there are few (if any) reports of miracles published in the scientific literature. The popular maxim that 'extraordinary claims require extraordinary evidence'^[4] seems quite reasonable and so it is little wonder that scientists tend to reject miracle stories.

The most obvious way to address this difficulty is by seeking experimental evidence for a miracle. Although the probability of actually observing one is low, imagining the investigation will be sufficient for our purposes. In this 'thought experiment' we shall try to observe the instant transformation of water into wine. We will simply decant deionised water from a jar into a clean wine glass and measure any changes in the physical and chemical properties of the fluid. Prayers, spells and rituals may be performed if desired, but must not interfere with the control of experimental conditions. To ensure that our results stand up to scrutiny we will need to pay particular attention to the environmental conditions and record every aspect of the experiment. It is important that there can be no doubt about our observations because we do not necessarily expect the miracle to be repeatable.

Perhaps a reasonable hypothesis for our experiment is that no change will be observed - if that is found to be the case, we can simply conclude that the miracle did not occur and our work will be difficult to publish. Suppose, on the other hand, that a miracle *does* occur and the wine glass is found to be full of a deep red claret. Unlikely though it seems, we must entertain the suggestion, or there was no point in performing the experiment. If that were to happen, what should we conclude?

In this imaginary experiment we have already satisfied ourselves with the control procedures and everything was measured and recorded so that there can be no dispute that the water did turn into wine. However, the interpretation is not as simple. If we want to claim that what we observed was a miracle by our definition, we need to be sure that the laws of nature have been violated. It is entirely possible that we have discovered a new natural phenomenon resulting from factors not yet known to science. To discount this possibility we would need to have a complete understanding of all natural laws – a claim which surely no scientist would dare make. After all, what we call natural laws are simply a compiled understanding of the Universe as we have found it

through scientific observations. So if we were to find water inexplicably turning into wine, we would need to update the natural laws, not claim that they have been violated. Charles Coulson describes how we should respond in a case like this:

when we come to the scientifically unknown, our correct policy is not to rejoice because we have found God; it is to become better scientists.^[5]

Perhaps the example of water turning into wine is a little too surreal to digest. A similar situation in the real-world might be the case of 'miraculous' cancer healings. Aside from anecdotal reports, which seem to be fairly common, there are also some recorded in scientific literature.^[6,7] The primary difference is that colloquially these are called miraculous healings, whereas scientists prefer the term 'spontaneous remission'.^[7] Although these cases defy our current scientific understanding, there is no way to scientifically distinguish whether the causes are natural or miraculous, so it would be unjustified to call these miracles.

In conclusion, our quest for scientific evidence of miracles has failed, but it did so because of a systematic inability of the scientific method to identify them. It is rather like hauling in a large fishing net and concluding that there are no fish less than six inches long in the sea - the scientific method has a blind spot for miracles. If the 'rational mind' wishes to look into the blind spots it will need to accept the limitations of science and consider other rational approaches to understanding the Universe.

References

- [1] The Bible, John 2:1-11
- [2] Dawkins, R., (2007), *The God Delusion*, Black Swan
- [3] Hume, D. & Selby-Bigge, L.A. (ed), (1902), *An Enquiry Concerning Human Understanding (2nd Edition)*, Oxford University Press
- [4] Popularly attributed to Carl Sagan after David Hume
- [5] Coulson, C.A. (1953), *Christianity in an Age of Science*, Oxford University Press
- [6] Westcott, R. (2002), *Brit. Med. J.*, 7363 (325), 553
- [7] Storey, R.E. et al. (2011), *Med. Oncol.*, 28, 948-950

Sebastian is a first year PhD student in Physics at Imperial College London