

What to believe about miracles

from R.J. Berry

Differences of interpretation within the Church of England have stimulated a re-examination of the "miracles" as recounted in the Bible.

Two years ago I was one of 14 signatories of a letter to the *Times* about miracles¹. All of us were professors of science in British universities; six were Fellows of the Royal Society. We asserted: "It is not logically valid to use science as an argument against miracles. To believe that miracles cannot happen is as much an act of faith as to believe that they can happen. We gladly accept the virgin birth, the Gospel miracles, and the resurrection of Christ as historical events. . . . Miracles are unprecedented events. Whatever the current fashions in philosophy or the revelations of opinion polls may suggest, it is important to affirm that science (based as it is upon the observation of precedents) can have nothing to say on the subject. Its "laws" are only generalizations of our experience. . . ."

A leading article in *Nature*² accepting our statement on the nature of scientific laws, dissented from our conclusion about miracles, terming them "inexplicable and irreproducible phenomena (which) do not occur — a definition by exclusion of the concept. . . . the publication of Berry *et al.* provides a licence not merely for religious belief (which, on other grounds is unexceptionable) but for mischievous reports of all things paranormal, from ghosts to flying saucers".

Subsequent correspondents disagreed. For example, Clarke³ objected that "your concern not to license 'mischievous reports of all things paranormal' is no doubt motivated in the interest of scientific truth, but your strategy of defining away what you find unpalatable is the antithesis of scientific"; MacKay⁴ emphasized that "for the Christian believer, baseless credulity is a sin — a disservice to the God of truth. His belief in the resurrection does not stem from softness in his standards of evidence, but rather from the coherence with which (as he sees it) that particular unprecedented event fits into and makes sense of a great mass of data. . . . There is clearly no inconsistency in believing (with astonishment) in a unique event so well attested, while remaining unconvinced by spectacular stories of 'paranormal' occurrences that lack any comparable support".

The credibility of belief in miracles has resurfaced in a report of the Church of England bishops⁵. The *Times* commented: "Did the two key miracles at the centre of the Christian faith, the Virgin Birth and the Resurrection, really happen? . . . The exercise has established one thing clearly:

that belief in miracles, at least where they are central to the faith, is thoroughly intellectually respectable. . . ."⁶

It would be easy to decry the criteria or standards of proof accepted by the bishops, but their integrity is presumably not in doubt. It is more profitable to enquire whether miracles are really credible, and, if so, what are the circumstances where they might be expected.

Natural law

"In an earlier age, miracles would have been one of the strongest weapons in the armoury of apologetic. A man who did such things must at the very least have the power of God with him. Jesus himself is represented as using this argument when he said, 'If it is by the finger of God that I cast out demons then the kingdom of God has come upon you' (*Luke 11:20*). For us today, by one of those twists that make up intellectual history, miracles are rather an embarrassment. We are so impressed by the regularity of the world that any story which is full of strange happenings acquires an air of fairytale and invention"⁷. The historical twist referred to by Polkinghorne was an inevitable consequence of the separation of observation (or test) from interpretation, which is the essential feature of what we call science. Before the sixteenth century "how" and "why" questions were answered in much the same way: acorns fell to the ground so that new oaks might grow; rain came so crops might flourish and people feed; and so on. The realization that the same event could be interpreted in more than one way led to an emphasis on mechanism, and therefore on the uniformity and predictability of natural events, with a consequent restricting of divine activity to the ever-decreasing gaps in knowledge. God became unnecessary, except as a rationalization for the unexplainable⁸.

By the seventeenth century scientists were using the "laws of nature" in the modern sense, and the physical and (increasingly) the biological worlds were regarded as self-regulating *causal nexi*. God was merely the "First Cause", and could intervene in the world only by breaking or suspending the "natural laws". Locke and Hume used the determinism of newtonian physics to argue that natural laws were inviolable, and therefore that miracles could not happen⁹. Their conclusion seemed to be vindicated in the nineteenth century when the dar-

winian revolution purged from biological systems the simple notion of purpose and created pattern. And as Cupitt says, "religion was more badly shaken when the universe went historical in the nineteenth century than it had been when it went mechanical in the seventeenth century"¹⁰. The futility of believing in a god unable to do anything exposed the problem that spurred the English bishops to re-affirm that miracles could happen¹¹.

Miracles and mechanisms

Defenders of miracles have tended to descend into an unconvincing mysticism or an assault on determinism. A few decades ago, it was fashionable to claim that physical indeterminacy gave God enough freedom to control events. Biological indeterminacy is a live debate now, particularly in sociobiology¹². For example, Lewontin (unlikely to argue that miracles are common or important) strongly attacked the reality of biological laws beyond "very special rules of comportment or particular physical entities If we are to find biological laws that can be the models for social laws, they will surely be at the level of laws of population, laws of evolution, laws of organization. But it is precisely such laws that are absent in biology, although many attempts have been made to erect them"¹³.

However, the case for miracles does not depend on indeterminacy, since the intellectual orthodoxy stemming from Hume's underlying thesis is not as strong as it is usually made out to be. C.S. Lewis pointed this out succinctly: "We must agree with Hume that if there is absolutely 'uniform experience' against miracles, if in other words they have never happened, why then they never have. Unfortunately we know the experience against them to be uniform only if we know that all the reports of them are false. And we know the reports to be false only if we know already that miracles have never occurred. In fact, we are arguing in a circle"¹⁴.

Exposing the fallacy of Hume's attack on miracles also reveals that it is based on an unjustified assumption, that events have only a single cause and can be fully explained if that cause is known. This is logically wrong. For example, an oil painting can be "explained" in terms either of the distribution of pigments or the intention and design of the artist; both explanations refer to the same physical object but they complement rather than conflict. In

the same way, a miracle may be the work of (say) a divine up-holder of the physical world rather than a false observation or unknown cause. Such an interpretation does not depend on any irruption into a causal network, since the determinism of the machine is only one of the levels of the phenomenon (*sensu* Polanyi¹⁵).

"Complementary" explanations of causation are excluded only by making the reductionist assumption that a single identifiable cause is the sole effect operating in a particular situation. This assumption is common, but unnecessary and restrictive. Medawar has dissected this clearly: "That there is indeed a limit upon science is made very likely by the existence of questions that science cannot answer and that no conceivable advances of science would empower it to answer. These are the questions that children ask — the 'ultimate questions' of Karl Popper. I have in mind such questions as: How did everything begin? What are we all here for? What is the point of living? Doctrinaire positivism — now something of a period piece — dismissed all such questions as nonquestions or pseudoquestions such as only simpletons ask and only charlatans of one kind or another profess to be able to answer. This peremptory dismissal leaves one empty and dissatisfied because the questions make sense to those who ask them, and the answers to those who try to give them; but whatever else may be in dispute, it would be universally agreed that it is not to science that we should look for answers. There is then a *prima facie* case for the existence of a limit to scientific understanding."¹⁶

As far as miracles are concerned, this means that they are impossible to prove or disprove on normal scientific criteria; we accept the possibility of their occurrence by faith, and equally deny them by faith. Even if we know or deduce the mechanism behind a miracle, this does not necessarily remove the miraculous element. For example, the Bible tells us that the Israelites crossed the Red Sea dry-shod because "the Lord drove the sea back by a strong east wind all night and made the sea dry land" (*Exodus* 14:21); the significance of the miracle lies in its timing and place rather than its actual occurrence.

Implications

The act of faith that denies the possibility of miracles is a straightforward reductionist judgement. Miracles by themselves are always susceptible to an explanation other than the miraculous (even if they have physical manifestations, such as "spontaneous" healing or the Empty Tomb), so the value of the reductionist assumption can be best tested by its implications. These were spelt out with depressing clarity in the nihilism of Jacques Monod¹⁷, and comprehensively answered by W.H. Thorpe¹⁸ who expounded a version of the

dualism of Sherrington, Eccles and Popper which is kin to the complementarity espoused above¹⁹.

There are implications of embracing a reductionist determinism which impinge on two recent controversies: creationism and the definition of human life. Creationism is largely an insistence that God made the world in a particular way, without using "normal" evolutionary mechanisms. Part of this claim stems from a restricted interpretation of the Bible, but it has the effect of prescribing that God acted in an interventionist fashion. Notwithstanding, it is entirely consistent with both evolutionary biology and Bible texts to maintain that God worked "complementarily" with genetic processes so that the world is both a causal outcome of mutation, selection, and so on, but *also* a divine creation. The creationist position is at odds with both scientific and theistic understanding^{20,21}. Individual human life has a physiological and genetic continuity with that of other humans (and indeed, other animals); the *value* of individual life lies not in genetic uniqueness (cancers and hydatidiform moles are also genetically unique) but in being (in Christian language) "made in the image of God". This *imago* is not a physical entity, and it is a category mistake to confuse it with genetic coding or mental function. Notwithstanding, defenders of the inviolability of the early embryo make this precise mistake. The *imago* is a non-biological attribute, and there is no logical (or scriptural²²) reason for assuming that it is present from conception. If this simple point was realized, the ethical debate over developments in human reproduction could proceed more sensibly.

The conventional view of miracles is that they depend on supernatural intervention in, or suspension of, the natural order. Some theologians have been over-impressed with scientific determinism, and have attempted a demythologized (miracle-free) religion. This endeavour is now unfashionable, but it is worse than that; Nebelick called it "a speculative-device imposed on unsuspecting persons. . . based on false presuppositions about both science and the scientific world view"²³. This is no help to scientists, and an interventionist God will always be an embarrassment to us.

I believe that the interpretation that miracles are a necessary but unpredictable consequence of a God who holds the world in being is more plausible and more scriptural than deist interventionism. This does not mean that apparent miracles should be approached with any less objectivity than we would employ for any scientific observation; our standards of evidence should be just as rigorous. Those who deny the possibility of miracles are exercising their own brand of faith; this is based on a questionable assumption, and

one which creates problems with its implications. Miracles in the New Testament are described as unusual events which are wonders due to God's power, intended as signs. Confining oneself wholly to this category (leaving aside the question of whether other sorts of miracles occur), this makes at least some miracles expectable and non-capricious, and independent of any knowledge of their mechanism.

In his exposition of the "Two Cultures", C.P. Snow described the scorn of the one for the other as intellectual Ludditism²⁴. Miracles are examples of events which may easily be denied by an illegitimate reductionist Ludditism; scientific reality will be hindered in the process. A doctrinaire disbelief in miracles is not "more scientific" than a willingness to accept that they may occur. Some years ago Sir George Porter wrote: "Most of our anxieties, problems and unhappiness today stem from a lack of purpose which was rare a century ago and which can fairly be blamed on the consequences of scientific inquiry. . . There is one great purpose for man and for us today, and that is to try to discover man's purpose by every means in our power. That is the ultimate relevance of science"²⁵. He was not writing specifically about miracles, but his argument applies. Miracles are not inherently impossible or unbelievable, and acceptance of their existence does not necessarily involve credulity, but does involve recognizing that science has limits. □

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