

Miracles With and Without Free Will – Free Will Without and With Miracles

Uwe Meixner, University of Augsburg

Abstract: This paper argues for a particular concept of miracle and for a particular concept of free will, contrasting them with other such concepts. On the basis of the favored concepts, it argues (1) that, rationally, it is an open question whether there are miracles, and (2) that it is not unreasonable to suppose that there is free will. Finally, the paper explores the logical relationship between the favored concept of free will and the favored concept of miracle. It is seen that a hyperbolic concept of free will is needed if it is to be logically possible that the result of an actuation of free will is a miracle. However, *also* in keeping with the favored, non-hyperbolic concept of free will, some actual events, though far from miracles, may plausibly be regarded as results of *divine* free action. Additional material on central issues in the paper can be found in the Appendix (not presented at the conference).

The philosophical discussions on miracles and free will suffer from an excess of conceptual pluralism, from a flood of metaphysically motivated conceptual decisions, decisions that are not made explicitly, but are transported in rhetorically veiled forms. Unsurprisingly, the logical consequences of these decisions are often overlooked or misjudged or confused. The overall result is a cacophony of countless voices, each voice trying without much avail to be louder than other voices in the fracas. I am afraid there is nothing that can be done about this situation, which is of a kind deplorably well-known in philosophy – except to offer some amount of clarification and orientation. This is what I will attempt to do in this paper. My conceptual decisions will be made explicitly, and as clearly as I am able to make them. I believe that my personal choice of concepts in the miracles-and-free-will debate is at least as good a choice as anyone’s. On the basis of my choice of concepts, I will demonstrate that there is no breach of rationality committed by those believers in miracles or free will or both *who stick to that choice of concepts*.

1. Miracles

In everyday life, any event that happens although one very reasonably expected that it would not happen is prone to be called a “miracle.” Thus, one concept of miracle is this: *event that takes places contrary to perfectly reasonable expectations*. However, this concept of miracle has the

undesirable side-effect that there are altogether *too many* miracles if it is chosen. Choosing an entirely objective concept of miracle – one entirely without concept-internal reference to human subjectivity – seems, *basically*, the best way to go, a concept such as: *event that takes place contrary to the laws of nature*. This definition of miracle I take to be *basically* correct – in the sense and to the extent in which definitions can be basically correct.¹

But *what* are laws of nature? Without entering deeply into a discussion of the various answers that have been given to this difficult philosophical question (and, of course, a comprehensive discussion cannot be provided here), it is nevertheless imperative to make at least one conceptual decision *here and now*: one must either take a law of nature to be something that “cannot be broken”; or one must take a law of nature to be something that “can be broken.”² If one decides that, conceptually, a law of nature cannot be broken, then a miracle is, I submit, conceptually still an event happening contrary to the laws of nature – *which laws, however, cannot be broken*. Thus, as a consequence of this conceptual decision on laws of nature, it turns out that for purely conceptual reasons there cannot be any miracles: “There are no miracles” turns out to be an analytic, a broadly logical truth – and those who on the contrary believe that there are miracles are made to look conceptually incompetent, incapable of thinking logically. To expose others – especially colleagues – as logically incompetent is a great temptation for philosophers, especially for analytic philosophers. The temptation must be resisted, however. It is, indeed, demanding too much to demand that no philosophical question of importance should be decided by choice of concepts alone; but certainly the question at hand should not be decided in this way. Too many decent people – most of them non-philosophers – have believed in miracles; what might be termed “conceptual arrogance” is entirely out of place here.

On the other hand, one must not make being a miracle too easy for an event. If a miracle were defined as an event which happens contrary – not to the laws of nature but – to *what we* (or rather, our best experts) *think are the laws of nature*, then being a miracle would turn out to be a status that is too easily accessible for an event. Correlatively, the concept of miracle in question is not purely objective, but relative to human subjectivity; and, to boot, it is relative to time: it might happen, due to changes in what we think are the laws of nature, that one and the same event is not a miracle for some time, and then becomes a miracle, or is a miracle for some time, and then becomes a non-miracle. While *the belief* that an event is a miracle, or that it is a non-miracle, should, of course, be conceptually allowed to come and go in the course of time, the event’s *being* a miracle, or *being* a non-miracle, *itself* should not be conceptually allowed to come

¹ For further miracle-concepts, see (A) in the Appendix.

² For more on laws of nature, see (B) in the Appendix.

and go in the course of time. Either an event is a miracle always, or it never is – is, was, or will be – a miracle; this, I submit, is a reasonably undeniable conceptual truth.

The reasons that have just been adduced against defining miracles as events happening contrary to *what we think are the laws of nature*, can also be adduced against defining miracles as events happening contrary to *the laws of nature* if the concept of law of nature *itself* is not purely objective but dependent *on our beliefs and attitudes*, and thereby on the vicissitudes of our beliefs and attitudes. In view of defining the concept of miracle, it may seem an advantage if laws of nature are taken to be conceptually dependent on human subjectivity; for *such* laws of nature are of course *capable of being broken*; but I nevertheless resist the idea that laws of nature are conceptually dependent on human subjectivity. A perfectly objective concept of miracle is what best fits the intentions of those who speak of miracles, and a perfectly objective concept of miracle requires a perfectly objective concept of law of nature. Moreover, as we have seen, a philosophically interesting concept of miracle on the basis of contrariness to the laws of nature requires that laws of nature *can be broken*, and of course it requires in the first place that *there are* laws of nature. In what follows I will proceed on the assumption that there is a perfectly objective concept of law of nature; that there are items which satisfy that concept; that the items which satisfy that concept – the laws of nature themselves, all of them perfectly objective – *can*, nevertheless, be broken: can be counter-instantiated. The only question is whether they ever *are* counter-instantiated *in actual fact*, by actual events.

This question cannot be decided by the evidence that can be adduced on either side, the yes-side and the no-side. On either side, the evidence ultimately comes down to the testimony of witnesses: a tiny minority claims that it has become personally acquainted with a miracle, a vast majority claims that it has never ever become personally acquainted with any miracle. On both sides, the evidence adduced does not rationally force assent to the thesis for which it is adduced as evidence. Being subjectively convinced – together with a few others – that one has become personally acquainted with a miracle, does not entail that there is a miracle. Being subjectively convinced – together with many, many others – that one has never ever become personally acquainted with any miracle, does not entail that there is no miracle. There is not even a preponderance of objective rationality on either side; for the only objective rationality is *logical* rationality, the rationality of consistency and entailment, and it is not more logically rational to believe that there are no miracles than it is to believe that there are miracles, and vice versa. The question of the existence of miracles can only be decided by what is *the objective truth* in this matter.

It is impossible to go through every argument that has been brought forward against the existence of miracles. They are all unsuccessful. For purposes of illustration, here is an argument

that many have been taken in by:³ If there were miracles, science would be impossible and everyday life would be very different from what it actually is: because, if there were miracles, the course of the world would be unpredictable. But, evidently, science is not impossible and everyday life is as it is: the course of the world evolves along predictable, sometimes perfectly predictable lines. Therefore, there are no miracles.

This argument relies on the implicit assumption that if there were miracles, there would be many of them in the course of time. This assumption is unfounded. Quite the opposite is true: events which take place contrary to the laws of nature are very rare in the course of time; they are absolute exceptions. Note that there would be no point in calling certain rules “laws of nature” if in the course of time they were *frequently* broken. They certainly *are not* frequently broken, but, *at most*, sporadically (perhaps *only once*, while being perfectly maintained in infinitely many other cases of application). Thus, it is reasonable to suppose that if, for example, the miraculous events that are recounted in the Bible have actually occurred, that then science as we know it and everyday life as we know it remain entirely unaffected: remain just as we know them to be. If those events have actually occurred, then the laws of nature which rule the course of the world are still the laws of nature, they do not disappear by having been broken (as little as the laws of a state disappear by having been broken); then the laws of nature are still there, being obeyed by the course of events, being objects of scientific research. If the Bible tells the truth, all that has to change are certain maximal metaphysical claims that some philosophers have made on behalf of the laws of nature; those claims have to be dropped – not science, and not the way in which we lead our everyday lives.

2. Free will

Vast amounts of intellectual ingenuity have been spent, and still are spent, on attempts to make free will conceptually compatible with determinism, and, no doubt, the highest ambition of not a few philosophers in this field is to show that free will actually *requires* determinism: that there can be no free will without determinism. I have to admit that I am somewhat tired of all this, that I feel somewhat bored by it.

Free will is the capacity to determine which one of certain alternative⁴ nomological possibilities for the future, each of which is *not already* otherwise determined to be actual and

³ See (C) in the Appendix for further examples of unsuccessful anti-miracle arguments.

⁴ *Alternative* is here taken to entail *logically incompatible*.

not already otherwise determined to be non-actual,⁵ will be actual. Determinism, on the other hand, is the doctrine that the laws of nature suffice to (effectively) determine the entire future course of the (actual) world, *given* what has already happened in the world up to any given present.⁶ Thus, if determinism is true, then there never are alternative nomological possibilities for the future; there is always only one nomological possibility for the future, no matter how far one looks into the future, and *that* possibility is already determined to be actual. Therefore, under determinism there is no free will. To admit this seems to me simply a matter of intellectual honesty.

Determinism is a metaphysically respectable doctrine; the same, however, is true of indeterminism. There is evidence on both sides. The evidence for determinism is the *predictability*, the evidence for indeterminism the *unpredictability* of certain actual events. Some actual events are perfectly predictable; most actual events are not perfectly predictable; some of them are perfectly unpredictable. On both sides, the evidence is insufficient for forcing rational assent. But does not the venerable principle of sufficient reason require the truth of determinism? No, it does not. Though it is perhaps true that every actual event has a sufficient reason for its taking place, it does not logically follow that the laws of nature together with the antecedent course of the world are a sufficient reason for the taking place of every – or, indeed, *any* – actual event. In particular, the principle of sufficient reason does not logically exclude that for some actual event or other the sufficient reason of its taking place is the actuated free will of a personal agent. That the actuated free will of a personal agent is the sufficient reason for the taking place of an event seems especially plausible with regard to those events which are considered to be deliberate activities. Now, one of the most deliberate activities I can think of is a person’s publicly taking a stand on a philosophical issue, for example, on the issue of free will; for example, by publicly denying its existence, or by publicly affirming its existence while at the

⁵ This qualification is not unnecessary: *In principle*, a determination for one of the alternative possibilities in question to be actual – respectively, non-actual – might *conflict* with an already existing non-actuality-determination – respectively, actuality-determination – for it; or such a determination might come to that possibility *in addition* to an actuality-determination – respectively, non-actuality-determination – already in place for it, thus constituting a case of *over-determination*. An actuation of the capacity of free will, however, conceptually excludes – qua actuation of free will – *both*: over-determination and conflict of determination.

⁶ It may seem that under determinism *thus defined* it may yet be the case that not every actual event is determined. Suppose that there is an initial world-event: there is nothing that has already happened in the world up to the present given by that event. Taking determinism as defined and assuming the truth of determinism, it may seem that the initial world-event has to be undetermined, while every later actual event is, indeed, determined. However, this somewhat infelicitous consequence can be obviated by stipulating that if there is an initial world-event and determinism is true, that then the laws of nature all by themselves suffice for the determination of that initial event, or alternatively (yet equivalently): that then what has already happened in the world up to the world’s first moment – i.e., up to the present given by the initial world-event – is the empty set and the laws of nature determine the initial world-event on this (empty) basis. (For this feat, the laws of nature must, of course, be in a certain way, and that there are laws which are in that way is, of course, not a matter of stipulation.)

same time maintaining determinism. (Sometimes philosophy can certainly seem a very strange, a perfectly absurd affair – at least it can seem so to me.)

The existence of free will entails *indeterminism*, as we have seen. This logical fact, however, cannot be used for establishing indeterminism; for the existence of free will is at least as much in doubt as is indeterminism itself. The (subjective) *appearance* of free will is, of course, not in doubt. We are appeared to as if we had free will, and therefore as if determinism were false and indeterminism true. Vast amounts of intellectual ingenuity have been spent, and still are spent, on attempts to expose the appearance of free will as an illusion – as a perhaps *experientially* unavoidable, but *intellectually*, for sure, recognizable and falsifiable illusion – and on attempts to show that this illusion, although it is an illusion, makes, nevertheless, perfect psychological and biological sense. I am afraid no efforts in this direction will ever make the *appearance* of free will go away or lessen its considerable power to convince. In fact, its power to convince is almost overwhelming; the belief that we have free will is suggested to us with an even greater force than the belief that there is a world outside of our minds, or the belief that there are other minds. Nevertheless, the appearance of free will *can*, of course, be intellectually resisted; it can be resisted with regard to its truth-content, its veracity. The appearance of free will simply does not prove the existence of free will.

The existence of free will, in the incompatibilist sense I have proposed, entails indeterminism. It does not follow from this elementary logical fact that indeterminism, conversely, entails the existence of free will. The incompatibilist conception of free will I have proposed is entirely free of the absurd idea that indeterminism and the existence of free will are logically equivalent; this absurdity, therefore, cannot be used for constructing a *reductio ad absurdum* of the proposed incompatibilist conception of free will. In particular, it cannot be held against that incompatibilist conception of free will that it conflates free action with chance.

If the temporal evolution of the world is indeterministic, it nevertheless does not have any gaps: at every moment of time there *still* is an actual world-event (and no more than *one* actual world-event). Under indeterminism, the laws of nature together with the antecedent course of the world at any given time cannot be responsible for this conspicuous *gaplessness*. What is it, then, that is responsible for it? It is either the actuated free will of one or more agents, or chance, or a combination of actuated free will and chance. If the principle of sufficient reason is true, then actuated free will – in other words, free action – is the only factor in producing, under indeterminism, the gaplessness of the course of the world. But if free will does not exist and the temporal evolution of the world is nevertheless indeterministic, then chance is the only factor in producing the gaplessness of the course of the world – and the principle of sufficient reason is, of course, not true then. For chance is entirely unable to provide a sufficient reason for the taking place of *any* event that takes place; on the contrary, chance entails – whenever it is invoked with

respect to an actual event – the absence of a sufficient reason for that event’s taking place. Thus, speaking of chance as “producing” something or “explaining” something or being “responsible” for something is a strictly figurative and, unfortunately, also a somewhat misleading use of language. In theology, one sometimes hears disparaging talk about “the god of the gaps”; for many contemporaries, the true god of the gaps is *chance*.

An actuation of free will can be entirely arbitrary; this does not turn that actuation into an instance of chance; for an actuation of free will makes an event come about, chance never ever makes any event come about. And an actuation of free will may perfectly follow the uniquely determined advice of rationality; this does not turn that actuation into an instance of determination by reasons; for, in its actuations, free will is free to follow, or not to follow, the advice of rationality. By the definition of free will, an actuation of free will is always a *sufficient* reason for some nomological possibility, which is not already otherwise determined to be actual and not already otherwise determined to be non-actual, *to be actual*; this is a *causal* sufficiency: it is an *actuality-producing* sufficiency. The sufficiency of an actuation of free will – its *efficiency*, or better: its *efficacy* – logically allows that the actuation is perfectly rationally justifiable in terms of the values and beliefs of the agent who has free will; at the same time, it does not logically require that the actuation in question be to any extent rationally justifiable in terms of the values and beliefs of the agent who has free will. As everything is what it is, and not something else, so free will is what it is, and not something else. The principle of identity is, indeed, trivial; obeying it in philosophy is hard – as in other cases, so also in the case of free will.

3. Miracles and free will

It is time to connect the concept of free will and the concept of miracle. What is the logical relationship of these two concepts?

Consider the following argument: Every actuation of free will – of free will in the incompatibilist sense – must induce a miracle, an event that takes place contrary to the laws of nature. Therefore, since the laws of nature cannot be broken, there can be no actuation of free will, which means that there is no free will.

This line of thinking – an attempt at a *reductio ad absurdum* of the incompatibilist conception of free will – takes several things for granted which cannot be taken for granted. First, it takes for granted – and cannot (reasonably) take for granted – that laws of nature cannot be broken, hence that there cannot be any miracles. I have argued that it is possible and not unreasonable to conceive of laws of nature as items that can be broken and yet remain laws of nature. I have argued that the existence of miracles is possible, and that whether there actually

are miracles is an open question. Second, the argument under consideration takes for granted – and cannot take for granted – that every actuation of free will must induce an event that takes place contrary to the laws of nature; in other words, it takes for granted – and cannot take for granted – that every actuation of the capacity to determine which one of alternative nomological possibilities for the future, given the past, will be actual – none of which is already otherwise determined to be actual, or non-actual – must lead to the occurrence of an event⁷ the occurrence of which is contrary to the laws of nature. It is a logical mystery to me *how* the determination of *such* a nomological possibility to actualness – that is, the determination of an event to actualness that is *possible under the laws of nature, not excluded by them, even given the past – could* (let alone, *must*) produce the occurrence of an event the occurrence of which is *contrary* to the laws of nature. Consider, in this context, an analogy which I believe to be helpful: Do not also indeterministic games have rules, and is it not possible for someone participating in an indeterministic game to determine his actual move in a given game-situation from several possible moves allowed by the rules in that situation – *without* producing a move that violates the rules?⁸

The true logical relationships between the concept of free will (in the incompatibilistic sense) and the concept of miracle is that, logically, there can be free will (this capacity) and the actuation of free will (the actuation of this capacity) without any miracles ever existing. And the converse of this is also true: Logically, there can be miracles without any actuation of free will ever existing, and without even the capacity of free will *itself* ever existing. Recall that a miracle is simply an event that takes place contrary to the laws of nature. Logically, a chance-event, for the occurrence of which – qua chance-event – there is no sufficient reason, can take place contrary to the laws of nature and, thus, be a miracle; logically, no agent and no free will is necessary for the existence of miracles. Logically, they might simply happen, for no reason at all.

From the logical, or conceptual, point of view, there can be free will without miracles, and miracles without free will. And the coexistence of miracles and free will is not excluded, either. Putting it in a different idiom: There are possible worlds where miracles occur, but no events that are induced by – no events which occur as the result of – an actuation of free will; for

⁷ Three things have to be distinguished: (1) the capacity, (2) an actuation of the capacity (or speaking generically: *the* actuation of the capacity), and (3) the result of an (generically: *the*) actuation of the capacity. Neither the capacity in question (free will) nor any actuation of that capacity – any free action – is an event; however, the result of an actuation of that capacity is always an event, an actually occurring event; or to put it differently: it is always the actual occurrence of an event. Note that in a secondary sense the resulting event – that is, *what is caused* – can also be called “a free action”; but in the primary sense, only *the causing* – the relevant actuation of the capacity of free will – is a free action. The distinguishing mark of the latter (*primary*) kind of free action is that free actions (of that kind), although they are necessarily connected with time, are not located in time. In contrast, location in time is precisely the distinguishing mark of the former (*secondary*) kind of free action.

⁸ For an elaboration of this analogy, see Meixner 2019.

example, worlds in which nothing has even the capacity of free will. There are possible worlds where events occur that are induced by an actuation of free will, but no miracles; such worlds are perfectly law-obeying, but not deterministic worlds. There are also possible worlds where miracles occur *and* events that are induced by an actuation of free will. This is true although there cannot be any event which is both a miracle *and* induced by an actuation of free will; there is no possible world where an actuation of free will induces a miracle. The impossibility in question is simply a consequence of the definition of free will *here used*, and of the definition of miracle *here used*: The definition of free will entails that an event must be nomologically possible if it is induced by an actuation of free will; the definition of miracle, however, entails that an event must be nomologically impossible if it is a miracle. Therefore, an event which is both a miracle and induced by an actuation of free will would have to be both nomologically impossible and nomologically possible, which is *logically* impossible.

The logical impossibility for an event to be both a miracle and, at the same time, induced by an actuation of free will, may seem dismayingly counter-intuitive in view of the fact that most alleged miracles are generally regarded as effects of the free action of a *divinely powerful* agent. Here it must be noted that there is also a much more demanding concept of free will than the one that I have been discussing in this paper. According to that other concept, free will is the capacity to determine which one of certain alternative *logical* possibilities for the future, given the past, will be actual, overriding, if necessary, any (positive or negative) determination in this respect that may happen to be already in place.⁹ An event which is induced by an actuation of free will that is being conceived of in this absolute, hyperbolic sense – in the sense of *omnipotence* – can, of course, be a miracle.

Returning to free will in the normal sense – to free will *we* may have – I note that there are, moreover, possible worlds where neither miracles occur nor events that are induced by an actuation of free will; every not just law-obeying but deterministic possible world is such a world. And an indeterministic possible world is such a world, too – if, and only if, *chance alone* fills all the gaps of determination in that world without violating any of its laws of nature. Many people these days believe that the actual world, *this* world, is precisely this: an indeterministic possible world in which chance – chance alone – fills all the gaps of determination without violating any of the given laws of nature – which world, therefore, is a world without miracles *and* without events that are induced by an actuation of free will, its indeterminism notwithstanding.

⁹ Such determination would have to be *extra-logical* (not logical) determination, since the alternative possibilities in question are alternative (hence – see footnote 4 – *logically incompatible*) *logical* possibilities relative to the *given past*: not one of them is logically excluded (or entailed) by the given past. (The past, of course, does not seem to be able to *logically* determine the future in any significant way at all; it is a quite different matter when we are talking not about logical, but about *nomological* determination.)

Is this really the truth about *this* world, the actual world? What is somewhat difficult to deny these days – in view of quantum mechanics – is that the actual world is an indeterministic world. I do believe that the actual world is an indeterministic world. In addition, however, it seems to me entirely plausible – in view of the phenotype of the actual world; in particular, in view of the evolutionary drama of nonhuman and human life – that at least some of the gaps of determination in the actual world are filled by events that occur not *by chance* (as one says), but are induced by consciousness-guided actuations of free will.¹⁰

Indeed, if the principle of sufficient reason is assumed, then *every* gap of determination in the actual world must be filled by an event that is induced by an actuation of free will; but perhaps the principle of sufficient reason can be denied. It is certainly not a logical principle, although in the past great philosophers – Leibniz, for example – treated it as being on a par with the logical principles.¹¹ The principle of sufficient reason is a metaphysical principle, distinguished by its high degree of prima facie rationality, far surpassing, in this respect, any principle of the causal closure of the physical world. Curiously, assuming that principle leads very quickly to the conclusion that there is an agent with at least *quasi-divine* capacities: If it is – *given* all that has happened before – not nomologically determined that this radium atom decays *now*, what makes it come about, then, that this radium atom decays *now*? It is a chance-event, *we* – or most of us – nowadays say; but under the principle of sufficient reason we cannot say this. Under the principle of sufficient reason, we must take the present disintegration of this radium atom to have a sufficient reason, and what other sufficient reason – given the absence of nomological determination – could it be than that this event – its occurrence – is induced by an actuation of free will? *Whose* free will could it be? *Who* could be interested – for some reason totally opaque to human understanding – in the disintegration of a particular radium atom – say, on a planet without life somewhere in outer space? *Who* could even know about this atom and be able to bring about its disintegration? There is, really, only one plausible answer to these questions.¹²

¹⁰ The connection between indeterminism, evolution, consciousness, and (incompatibilistically) free action are treated in several of my papers: see, for example, Meixner 2006 and 2008.

¹¹ This is not to say that Leibniz had exactly the same conception of a principle of sufficient reason that I have. For more on this, see (*D*) in the Appendix. (I am grateful to Christian Weidemann for forcefully pointing out to me the need of a differentiation between Leibniz’s principle of sufficient reason and mine.)

¹² A different “last word” can be found in (*E*) at the end of the Appendix. *Here*, it must be noted that not all so-called “deeds of God” are either law-abiding (that is, events resulting from non-miraculous divine causation) or law-transgressing (that is, events resulting from miraculous divine causation). Some (alleged) deeds of God are neither law-abiding nor law-transgressing, for example, the creation of the world, which includes the installation of the rules that rule it – rule it, very likely, *without* totally determining it and *with*, perhaps, some exceptions now and then.

4. Appendix

(A) Further miracle-concepts

The conception of miracles as events that take place contrary to the laws of nature is a *minimal* conception of miracles: it takes a central necessary condition for *miraclehood* as being also sufficient for it. Nothing forbids defining *on the basis* of the minimal concept logically stronger concepts of miracle, as for example: (a) *x* is a *divine miracle* =_{Def} *x* is a miracle [qua event taking place contrary to the laws of nature] and is brought about by God; (b) *x* is a *miraculous divine sign* =_{Def} *x* is a divine miracle [in the sense just defined] and signals to us (human beings) this or that intention of God.

The miracle-concepts defined by definitions (a) and (b) do not compete with the miracle-concept favored in the main body of the text (on the contrary, they entail it). Some miracle-concepts that do compete (for our allegiance) with the concept here favored have already been treated in Section 1; another prominent *competing* miracle-concept is this: (c) *x* is a miracle =_{Def} *x* is an actual event that would not have occurred if nature had been left to itself. The first question regarding (c) is this: What does “nature is left to itself” mean? It can only mean that *no agent external to nature exerts a causal influence on nature*. Thus, the miracle-concept in question (the one defined by definition (c)) presupposes – as a condition of the applicability of that concept (in view of its being defined by a counterfactual conditional) – that *some agent external to nature exerted a causal influence on nature*. It has no application in possible worlds where nature is always left to itself: where no agent external to nature ever exerts a causal influence on nature; in such worlds there are no miracles. In contrast, the miracle-concept *here favored* does not exclude miracles that do not have makers – let alone, *rational* makers – but simply happen, for no cause (and no reason) at all.

A more serious shortcoming of the competing miracle-concept defined by (c) is that it is unable to distinguish between an event which is a miracle and an event which is the result of purposeful *law-abiding* special divine action.¹³ If an event is the result of law-abiding purposeful special divine action – that is, if God actualizes, for a certain reason, a possible event the actuality of which is on the basis of the past neither excluded nor entailed by the laws of nature – then the event is actual and would not have occurred if nature had been left to itself (if it had been left to itself, some purposeless chance-event would have happened); hence – according to the miracle-

¹³ Many – perhaps all – of the so-called “miracles” that have happened in Lourdes may in fact be just this: the result of purposeful *law-abiding* special divine action (and in this sense: divine signs, albeit non-miraculous ones) – and *not* breakings of the laws of nature, *not* miracles in the sense of the word “miracle” here taken to be the best sense. In any case, *to unbelievers*, they are not miracles *in any sense*; to them, they are chance-events: very unlikely events that the laws of nature and the antecedent course of the world did not entirely exclude and which, therefore, did not happen contrary to the laws of nature; when they did happen, they happened *for no cause and no reason at all*.

concept in question – it is a *miracle*. But *no*; intuitively, it is *not* a miracle; just as it is not a miracle if one of us human beings actualizes, for a certain reason, a possible event the actuality of which is on the basis of the past neither excluded nor entailed by the laws of nature.

The miracle-concept defined by (c) is designed to take the (alleged) *scandal to rationality* out of *miracles*. Since there is, in fact, no such scandal, this particular (and peculiar) motivation for the miracle-concept defined by (c) evaporates. (See, furthermore, the remarks below on the concept of law of nature which fits with the (c)-concept of miracle.)

(B) More on laws of nature

A law of nature is something impersonal and non-agental (hence something mindless, and something which, properly speaking, does not *do* anything) which is transcendent to nature but, nevertheless, *mirrored* in nature. If a law of nature is *perfectly mirrored* in nature, then, and only then, it is mirrored by an exceptionless regularity (in nature); that is, by something that can be described by a *true* universally quantified sentence: $\forall x(A(x) \supset B(x))$,¹⁴ where, (i), the variable “x” runs over all space-time points and, (ii), the condition A(x) (of the applicability of the law) is fulfilled¹⁵ – either universally (such that $\forall xA(x)$ is true), *or* frequently in global distribution, *or* at least by some instances (perhaps, indeed, by only one instance). Note that *so far* in this section of the Appendix it is an open question whether every *mirroring* of a law of nature in nature must be a *perfect* mirroring. Note also that there are no laws of nature which are *merely (yet highly) probable*,¹⁶ although there are, presumably, laws of nature which, if *perfectly* mirrored in nature, are mirrored by *exceptionless* regularities that involve probabilistic properties and relations.

Why are laws of nature transcendent to nature? *Answer*: What makes them transcendent to nature is their *modality*, which is a central aspect of them that cannot be read off the course of

¹⁴ If a regularity is *not* exceptionless, then it has at least one exception, and this means that there is a counter-instance to $\forall x(A(x) \supset B(x))$, in other words, that $\exists x(A(x) \wedge \neg B(x))$ is true. Thus, that a regularity has exceptions (at least one) does not mean that it is described by a true sentence of the form $\forall x(A'(x) \wedge x \neq a_1 \dots \wedge x \neq a_n \supset B(x))$ while $B(a_1), \dots, B(a_n)$ are all false and $A'(a_1), \dots, A'(a_n)$ all true: exceptions to a regularity are not “exceptions” a_1, \dots, a_n that are provided for in its very description. Note that a regularity which is described by a true sentence of the form $\forall x(A'(x) \wedge x \neq a_1 \dots \wedge x \neq a_n \supset B(x))$ and has the (so-called) “exceptions” a_1, \dots, a_n is quite *exceptionless* (i.e., not counter-instantiated).

¹⁵ Are there not laws of nature whose condition of applicability is never ever fulfilled, for example, Newton’s First Law of Motion? *Answer*: Newton’s First Law of Motion is, in fact, not a law of nature, but an idealizing description of what is indeed a law of nature. The idealizing description was chosen because it is more compendious and simple than the description which is actually appropriate for the real law of nature Newton’s First Law *points to* (say, “If a body approaches a state in which no forces act upon it, then, in the measure of its approach to that state, it also approaches a state of uniform motion in a straight line”).

¹⁶ Sometimes “law of nature which is merely probable” is used in the sense of “merely probable *candidate* for a law of nature.” *In this sense*, there are, of course, laws of nature which are merely probable. Similarly, there are, *in a sense*, dead animals and animals that are dead, although, *in another sense*, there are no animals that are dead.

nature, but can only be *believingly attributed* by us to a given candidate for a law of nature, when (the course of) nature points us to just such a candidate (classically, via a regularity that, *as far as we have seen so far*, is quite exceptionless). The modality of a law of nature can either be taken to be *ontic* (in another word: *alethic*) *necessity*, or (not ontic but) *deontic necessity*. The two concepts of necessity exclude each other. If laws of nature are taken to be ontically necessary, then they cannot be broken; if laws of nature are taken to be deontically necessary, then they can be broken. If laws of nature are taken to be ontically necessary, then the laws of nature are the analogs of logical laws, or of mathematical laws – if such laws are self-subsistent (hence not made by us or God or anyone). If laws of nature are taken to be deontically necessary, then, plausibly, they are the analogs of the rules of a game, or of the laws of a state – which laws are not self-subsistent but dependent for their existence on a lawmaker. However, even if laws of nature are deontically necessary, they have in common with ontically necessary laws that we (human beings) and all other beings in nature are not free to break them (it is not up to us or anything else in nature to break them or stick to them).

In the main body of the paper, it was decided that laws of nature can be broken, hence that they are not ontically necessary; thus, if they are mirrored in nature (as they must be qua laws of nature), then they need not be *perfectly* mirrored there, but can have exceptions: can have counter-instances. Since laws of nature have necessity (qua laws), but are not ontically necessary, it follows that laws of nature are deontically necessary. The question of the origin of laws of nature was not treated in the main body of the paper and will not be treated here (in this Appendix). It is in logical principle possible (but is it plausible?) to assume that deontically necessary laws of nature are self-subsistent (that is, are without a maker).

Consider, now, the concept of law of nature that was not treated in the main body of this paper and that fits with the (c)-concept of miracle treated in the previous section of this Appendix: x is a law of nature \equiv_{Def} x is something impersonal and non-agental which, when nature is left to itself (in other words: *when no agent external to nature exerts a causal influence on nature*), determines on the basis of what has already happened how nature is behaving. One trouble with the concept of law of nature given by this definition is that, intuitively, even if nature is left to itself, a law of nature – and even the totality of the laws of nature – may still *not completely* determine on the basis of what has already happened how nature is behaving (for *chance* may have a say in this). Another trouble is that, intuitively, even if nature is *not* left to itself, the laws of nature may nevertheless not be violated and may still determine *to some extent* on the basis of what has already happened how nature is behaving. Indeed, if *we* (human beings) do not leave nature to itself, *we* rely heavily on unviolated and functioning laws of nature. (The *naturalistic* idea of our doings, of course, is that all our doings are just a part of *nature left to itself* – which, however, seems hardly plausible.)

(C) Two popular (but unsuccessful) anti-miracle arguments

The argument from scientific method: The existence of miracles must be verifiable on the basis of intersubjectively reproducible observations. The existence of miracles is not thus verifiable. Therefore, miracles don't exist.

Response: It is true that in the natural sciences a phenomenon is taken into account only if its existence is inferable from intersubjectively reproducible observations (usually, *given* an appropriate experimental setup, appropriate instruments, etc.). But it does not follow that a phenomenon does not exist if its existence is not thus inferable. Otherwise, there would be (not only no miracles but also) no historical events that leave no permanent intersubjectively detectable traces; but there can be no doubt that there are historical events that leave no permanent intersubjectively detectable traces. (Cleopatra certainly said something to Caesar when they spent their first night together.)

Hume's argument: There is uniform evidence against the existence of miracles. There are, therefore, no miracles.

Response: That there is uniform evidence against the existence of miracles can only be affirmed if all reports of miracles in the past are bogus. But that they are all bogus has not been established, neither by Hume nor by anyone else, neither *a posteriori* nor *a priori*. (It has not been established *a priori* because miracles – though *nomologically* impossible – are *logically* possible.) And even if it had been established that all reports of miracles in the past are false, it would certainly not follow that there are no miracles: In other contexts Hume himself rather convincingly argued that the evidence is always limited (for us) and quite insufficient to justify an unrestrictedly universal proposition (as, for example, “There are no miracles”); he thereby became the father of the so-called “problem of induction.”

(D) Leibniz's principle of sufficient reason

Leibniz, I believe, would have had no problem with accepting the truth of *my* principle of sufficient reason – “Every actual event has a sufficient reason for its taking place” – as a logical consequence of *his* principle of sufficient reason which, plausibly, can be formulated as follows: “Every contingent fact has a sufficient reason for its obtaining.” *His* principle entails *my* principle because “x is an actual event” entails “it is a contingent fact that x is an actual event,” and because “[the state of affairs] that x is an actual event obtains”¹⁷ entails “x takes place.” However, there is also a deep difference between the two principles, since Leibniz's conception of *sufficiency* certainly departs from mine. According to Leibniz, if x is a *sufficient* reason for y, then

¹⁷ The *that*-phrase is the (grammatical and logical) subject of “obtains.”

x *necessitates* y (that is, necessitates y 's actuality) *and* x *is itself necessary* (that is, the actuality of x is itself necessary). I, in contrast, neither require that a sufficient reason be necessary nor that its sufficiency amount to necessitation. Note that if x is necessary and necessitates y , that then the (correlative) contingency of y is *logically excluded*; thus, Leibniz's principle of sufficient reason appears to be incoherent (in the sense that its succedent condition apparently contradicts its antecedent condition – once the principle is reformulated as a general conditional: “For every x : if x is a contingent fact, then x has a sufficient reason for its obtaining”). He can, however, save his principle from incoherency by taking “contingent” in the sense of “*apparently* contingent” (namely, as contingent in appearance to us human beings, who have limited cognitive capacities and do not know all the “roots of necessity”), *or* by letting “contingent” mean “*logically* contingent” whereas “necessary” and “necessitates” are not meant in a *logical* sense. It appears Leibniz chose the first option, which means that *his* principle of sufficient reason entails determinism – and, indeed, *logical* determinism if the relevant modalities (“necessary,” “necessitates,” “[apparently] contingent”) are taken to be *logical* ones (hence to be synonyms of “*logically* necessary,” “*logically* necessitates,” “[apparently] *logically* contingent”). *My* principle of sufficient reason is, of course, far from entailing determinism.

(E) Advice for unbelievers: What to do when one is confronted with an ostensible miracle

How to stay an unbeliever when one is *not directly* confronted with an ostensible miracle, but only with a report of it, is well-known: Take the position that you will only believe that a miracle has happened when you have seen it with your own eyes. This is rational although you certainly believe many things that you have *not seen* with your own eyes, even *cannot see* with your own eyes. After all, miracles are a very special matter, deserving special treatment! In the very unlikely case that you are *directly* confronted with an ostensible miracle, that is, if you have (apparently) seen the event in question with your own eyes, then the first line of defense is to declare the event an illusion – if necessary, a collective and long-lasting illusion. Very likely you will find enough evidence to corroborate this reaction. However, there may also be circumstances that vitiate this reaction (say, you have *no reason* to doubt your perceptual faculties, neither consciousness-internal, nor neurophysiological, nor any other reasons). What to do now? It's easy: Accept the event in question as real (as having really happened), but deny that it is contrary to the laws of nature. (This reaction is, of course, also rationally effective against those very rare miracle-reports that come from absolutely trustworthy eye-witnesses.) Confidently assert that the laws of nature are simply not what we thought them to be. The *additional* idea which is more often than not connected with alleged miracles: the idea that they have been brought about *by God* – which idea, note, is logically independent of their being miracles or non-miracles – can, if the event in question proves to be truly inexplicable in a non-

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supernatural way, be roundly rejected by claiming that the event in question was just a matter of *chance*. No one in this world can disprove this, and chance is much better than God, is it not? All is well then.

References

Meixner, U. 2006: Consciousness and Freedom. In: A. Corradini, S. Galvan, E. J. Lowe (eds.), *Analytic Philosophy Without Naturalism*. London: Routledge, 183-196.

Meixner, U. 2008: New Perspectives for a Dualistic Conception of Mental Causation. In: *Journal of Consciousness Studies* 15, no. 1, 17-38.

Meixner, U. 2019: Playing God. In: *Religions* 10 (3), 209; <https://doi.org/10.3390/rel10030209>