

CAN KANTIAN LAWS BE BROKEN?*

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Abstract: In this paper I explore Kant's critical discussions of the topic of miracles (including the important but neglected fragment from the 1780s called "On Miracles") in an effort to answer the question in the title. Along the way I discuss some of the different kinds of "laws" in Kant's system, and also the argument for his claim that, even if empirical miracles do occur, we will never be in a good position to identify instances of them. I conclude with some tentative remarks about the notorious suggestion that intelligible finite agents, too, might have some sort of influence over the laws of nature. The goal throughout is to show that exploring Kant's answer to a traditional question in philosophical theology can deepen our understanding of his metaphysics and epistemology of nature generally.

1 Introduction

Surely the answer to the question is No. One learns in any respectable course on the *Critique* that Kant's goal was to skirt between the rationalism-dogmatism of Leibniz and Wolff and the idealism-skepticism of Berkeley and Hume while also defending a strict deterministic picture of the empirical world, and that part of his strategy involved deducing the *universal and necessary truth* of the so-called Causal Principles. By guaranteeing *a priori* that "all empirical alterations occur according to the law of the connection of cause and effect" (Second Analogy, A188/B232) and "all simultaneous spatial substances are in reciprocal interactions with one another" (Third Analogy A211/B256), the Causal Principles supplant the rationalist's principle of sufficient reason, at least in the empirical world, and (allegedly) offer a better defense of science and common sense against skeptical attack.

* I am grateful for the invitation to contribute to an early issue of *Res Philosophica*. The time did seem ripe for 'Modern Schoolman' to be retired, but my hope is that this paper will provide some continuity with the tradition of *Modern Schoolman* by exploring a modern philosopher's view about a classic scholastic issue. Portions of this paper are drawn from a longer effort that is forthcoming in [Look \(2014\)](#). My thanks to the editor for the permission to use some of that material here.

Kant thinks there is a price to pay for such a great benefit, of course: the fundamental or “transcendentally real” things-in-themselves, including any transcendentally free agents, become epistemically inaccessible. Kant sometimes expresses nostalgia for the unbridled realism of his youth, but he also clearly thinks the price is worth paying: transcendental idealism gives us a deterministic world of experience that is *certain* from the outset to be safe for natural science and induction. So the answer to the question in our title is surely No.

It is sometimes suggested that Kantians (almost as much as Hegelians after them) get a perverse pleasure out of taking the middle path whenever possible. In this paper I want to argue, perversely or not, that the answer to the question in the title might be both No *and* Yes, and that Kant himself recognized this. I’ve just outlined the main reasons for the “No” part of the answer: the Causal Principles of the Analogies, as well as the dynamical-mechanical principles that result from their application to the concept of matter, are “universal and necessary” laws as far as the empirical world is concerned. Moreover, Kant thinks we can prove this *a priori* (though *how* those arguments go is a matter of notorious complexity). So if one of these general principles of the metaphysics of nature is what is meant by a “Kantian law,” then the answer is indeed No: *that* kind of law cannot be broken.

But there is also a “Yes” part of the answer: those very general principles are not what we (or Kant) often think of when we talk about the “laws of nature” and their breakability. What we often think of are the more specific or “particular” mechanical, dynamical, chemical, biological, and psychological principles by which we predict the behavior of planets, oceans, plants, human bodies, billiard balls, colleagues, particles, and so forth. With respect to at least *some* of these more specific principles—the ones that are not entailed by the fundamental principles of the *Critique* and the *Metaphysical Foundations*, or able to be mathematically demonstrated on their own—Kant’s picture does leave room for the occasional exception. For starters, Kant did not think the chemistry of his day had achieved the status of a genuine *Wissenschaft*, or that biology and psychology would *ever* do so (“it is absurd to hope,” he says, that there will be a “Newton . . . of the blade of grass” *KU* 5:400). So the principles of those not-quite-sciences can admit of exception and are not, at present, even candidates for genuine laws (*MFNS* 4:468–471). But as we will see, when Kant takes up the traditional doctrine of miracles, he seems willing to allow that even some of the “particular” empirical principles that we *do* typically think of as laws can fail to determine what happens. It is in that sense, I submit, that some Kantian laws can be broken.

Commentators typically focus on the No part of the answer and ignore the surprising number of texts in which Kant expresses openness to the possibility and even actuality of miracles in the empirical world. When they do acknowledge such texts, they downplay them as throwaway political

gestures in the direction of the theological censors with whom Kant often wrangled.¹ My interpretive strategy here, by contrast, assumes that *if* we can develop a workable model of empirical miracles within the context of Kant's overall philosophy of nature, then the presence of those texts (together with the principle of charity) should push us in the direction of the Yes-and-No synthesis presented below.

In what follows I first explore Kant's comments on three traditional conceptions of miracle (section 2) and then offer a Kantian analysis of what a miracle in the empirical world would have to be (section 3). In sections 4 and 5 I draw on notes and lectures from the Critical period—including an important but neglected document from the late 1780s that bears the title “On Miracles” (*Über Wunder*)—to sketch a model of how empirical miracles might be possible within Kant's larger framework. Section 6 focuses on Kant's claim that, even if empirical miracles are possible, we will never be in a position to identify individual instances of them. In section 7 I conclude with some remarks concerning Kant's notorious suggestion that intelligible finite agents, too, might have some influence over the laws of nature. The goal throughout is to show that this exploration of Kant's answer to a traditional question in philosophical theology can deepen our understanding of his metaphysics and epistemology of nature generally.

2 Creation, Conservation, and Comparative Miracles

Like Leibniz, Kant envisions God as not only the metaphysical ground of all possibility, but also as the causal origin of all finite being. Unlike Leibniz,² however, Kant does not regard creation itself as a miracle: “what happens outside the world . . . is not a miracle, e.g. creation is no miracle.” A miracle, rather, is “that which happens contrary to the order of nature in the world” (*Mrongovius* 29:870); it has to “interrupt (*unterbricht*) the order of nature” (*Beweisgrund* 2:116).³ Because creation is a condition of the existence of the order of nature, it “cannot be admitted as an occurrence among the appearances” (A206/B251–252), and is thus not an interruption of that order.

What about God's role in keeping the world in being over time? There are obvious difficulties for this doctrine given that Kant thinks we must consider not only God but all the other supersensible things-in-themselves

¹ Thus Peter Byrne mentions “Prussian censors” on his way to concluding that Kant's apparent “defense of the real possibility” of miracles is “either artful or confused” (2007, 163). See also Kühn (2001, 360ff). For Ameriks' more nuanced but still broadly skeptical account see Ameriks (2014).

² For creation and concurrence as “miracles of the first rank,” see *Discourse on Metaphysics* §32 (1989, 63–64); *Theodicy* §249 (1952, 280); Fourth Letter to Clarke §44 (2000, 27).

³ This second phrase is from a pre-critical essay of 1763, but there are similar descriptions in various critical lectures. See *L*₁ (28:217ff), *Dohna* (28:667), *Pölitz* (28:1109).

as non-temporal.⁴ All the same, Kant is willing to talk of “conservation” (*Erhaltung*) in this context, remarking in a lecture from the Critical period that “the same power required for the creation of substances is also needed for their conservation” (*Pölitz* 28:1104). Whether and how this conservation doctrine ultimately differs from Leibnizean concurrence is a matter of some dispute.⁵ Either way, however, Kant clearly doesn’t regard such activity as miraculous: “Just as little [as creation] is conservation a miracle.—It is no event in the world” (*Dohna* 28:667).

There is a third concept of miracle in the scholastic, Leibnizean, and Newtonian traditions that Kant also considers—namely, that of “comparative” or “relative” miracles. According to the tradition, these are dazzling feats performed by non-divine agents (angels, typically) that are astonishing in comparison with ordinary experience, but in fact follow from the preceding conditions and the laws.⁶ In lecture discussions, as well as in “On Miracles,” Kant distinguishes between a “*miraculum rigorosum*, which has its ground in a thing outside the world (thus not in nature)” and a “*miraculum comparativum*, which to be sure has its ground in nature, but in one whose laws we do not know; of the latter sort are the things we ascribe to spirits” (*Kies* 18:321; see also *L*₁ 28:219, *Dohna* 28:667–668). In *Religion*, too, Kant talks about “angelic” and “diabolical” miracles and seems to think that they are really possible, though not easy for us to identify or understand (*R* 6:86–87). But for Kant—as for Aquinas, Leibniz, and Newtonians like Samuel Clarke—comparative miracles (*Wunder*) are really just objects of wonder (*Bewunderung*): dazzling but fully naturalistic events caused by natural, finite beings according to particular empirical laws with which we are not presently familiar.

What we have seen so far of Kant’s comments in his lectures, published writings, and *Nachlass* points in the direction of the following analysis of a miracle “rigorously-speaking”:

⁴ “For in God only one infinite act can be thought, a single, enduring force which created an entire world in an instant and preserves it in eternity. Through this act, many natural forces were poured out, as it were, in this world-whole, which they gradually formed in accordance with general laws” (*Pölitz* 28:1096; cf. 28:1104).

⁵ A few pages after the passage just quoted, Kant is recorded as saying that “[i]n the same way there takes place no *concursum* of God with natural occurrences. For insofar as they are supposed to be natural occurrences, it is presupposed that their first proximate cause is in nature itself, and it must be sufficient to effect the occurrence, even if the cause itself (like every natural cause) is grounded in God as the supreme cause” (28:1106). See [Hogan \(2014\)](#), [Brewer and Watkins \(2012\)](#), and [Insole \(2013\)](#) for discussions of Kant on concurrence, freedom, and theological determinism. [Lehner \(2007, 316n\)](#) argues that God does not concur with events in nature but does concur with our free actions. For more on moral concurrence, see [Chignell \(2013\)](#) and [Stevenson \(2014\)](#).

⁶ See Leibniz, *T* §249 (1952, 280). Cf. with Aquinas: “although the angels can do something that is outside the order of corporeal nature, yet they cannot do anything outside the whole created order, which is essential to a miracle” (*Summa Theologica*, 1955, I.110.a4). For the Newtonian tradition, see [Harrison \(1995\)](#).

(K) *A miracle obtains when something that is not a part of nature purposively intervenes to produce an event in time that counts as an exception to a particular empirical law.*

Compare this with the analysis of *miraculum rigorosum* that we find in Leibniz:

(L) “rigorously speaking, God performs a miracle when he does a thing that exceeds the forces that he has given to and conserves in creatures” (1967, 117).

(L) refers to *any* divine act that exceeds what finite creaturely powers produce according to their own natures. So that includes, as we have seen, creation and concurrence themselves. Kant agrees with Leibniz and other rationalists in thinking of the content of the natural laws as grounded in the natures and powers of finite substances.⁷ But he differs in focusing more narrowly on *exceptions* to them; this means, as we have seen, that creation and conservation don’t count.⁸ Thus (K) seems closer to Hume’s famous definition of miracle as

(H) “a transgression of a law of nature by a particular volition of the Deity or by the interposition of some invisible agent” (1902, 115).

Hume follows Samuel Clarke and some medievals here in making explicit reference to the purposive activity of a deity or “invisible agent” of some sort—a miracle isn’t just *any old* exception to a natural law (see Adams 2013). Kant acknowledges this point about purposiveness in his lectures,⁹ and so I have included it in (K).

A final note about the conceptual territory: scholastic philosophers often distinguished between miracles generally and miracles that are “contrary to nature”:

[A miracle] is called *contra naturam* when there remains in nature a disposition that is contrary to the effect that God works, as when he kept the young men unharmed in the furnace even though the power to incinerate them remained in the fire, and as when the waters of the Jordan stood still even though gravity remained in them. (Aquinas, *De Potentia* q.5, art.2, ad.3; qtd. and trans. Freddoso 1991, 573)

⁷ For discussion, see Watkins (Forthcoming).

⁸ Cf. with Aquinas: “a miracle properly so called is when something is done outside the order of nature” (1955, I.110.a4). Marilyn McCord Adams points out that “outside” (*praeter*) here means something like *via a different route*. So for God to act outside of nature is “to produce effects that nature can produce, but not that way.” She also notes that Aquinas anticipates Kant’s view that creation and other effects that “lie entirely outside the range of natural causal powers” are not properly-speaking miraculous (Adams 2013, 12–13).

⁹ Miracles are “worked into the course of the world by God *in order to bring about some necessary aim of his*” (Pölitz 28:1110–1112, my emphasis)

There was debate among scholastic and early modern philosophers as to whether it is fitting for God to oppose the natural powers of created substances in this way. Suarez argues for concurrentism precisely because it avoids *contra naturam* miracles, Leibnizians and Newtonians also typically reject them, and occasionalists side-step the issue by denying *any* natural powers to finite things. The Kantian conception in (K), by contrast, is neutral on this point: if there are any *contra naturam* events caused by God, then they are clearly miraculous. But so are events that “interrupt” or run “contrary to the order of nature in the world” by way of God simply *adding* something over and above the natural powers of things (again, see *Mrongovius* 29:870; *Pölitz* 29: 1109). As we will see, Kant’s explicit discussions tend to focus on “complementary” miracles of the latter sort.

3 Further Textual Considerations

We have seen that the Causal Principles of the Second and Third Analogies guarantee that every alteration in nature occurs in accordance with a rule, and that every spatio-temporal substance existing at *t* is in reciprocal causal relations with every other spatio-temporal substance existing at *t*. These principles are known *a priori*, and are the transcendental basis of the lawfulness of nature. They can also be further specified in relation to what Kant calls the “empirical concept of matter”: the result is the set of dynamical and mechanical laws that he outlines in the *Metaphysical Foundations*. Taken together, these principles constitute the “metaphysics of corporeal nature” (4:472).

Kant makes it clear in “On Miracles” (also known as “the Kieseewetter fragment”) that “no alteration in the world (thus no beginning of that motion) can arise without being determined by causes in the world according to *general laws of nature (Naturgesetzen überhaupt)*, thus not through freedom or a miracle proper” (*Kies* 18:320, my emphasis¹⁰). For reasons that will become obvious below, I think we need to interpret “general laws of nature” here as referring to *a priori* principles, rather than to more specific empirical laws. This is supported by Kant’s equation, later in the very same sentence, of “law of nature” with “causality” *simpliciter*: “appearances according to the law of nature (of causality) [*die Erscheinungen nach dem Gesetze der Natur (der Causalität)*] are what determine time” (*ibid.*). If this is right, then Kant’s negative claim in this passage is simply that there can be no events (free, miraculous, or otherwise) in the material world that fail to adhere to the *a priori* laws established by the metaphysics of corporeal nature.¹¹

¹⁰ Here and below I have used italics to add emphasis, and noted that in parentheses. Where the emphasis is original, I use bold type.

¹¹ Eric Watkins points out (in conversation) that Kant does not consider the question of whether there could be a different kind of *matter*—a kind of matter that is not captured by what Kant admits is our merely “empirical concept” (4:470) and thus need not adhere to the

The other main place to look for Kant's view on miracles is in *Religion*—in particular in the second of the four “parerga to religion within the boundaries of pure reason.” The parerga doctrines do not belong to a religion of pure reason, but “yet border on it” and are thus worthy of discussion (R 6:52).¹² In the main body of Part Two, Kant had already asserted that we don't have either a theoretical basis or a practico-religious need to postulate the virgin birth or the bodily resurrection. In the parergon attached to that Part, Kant starts off in the same vein by claiming that a moral religion (“the heart's disposition to observe all human duties as divine commands”) is such that any miracles connected with its inception are completely dispensable. Belief in historical empirical miracles, in other words, is a ladder that can be kicked away once we come to accept the authenticity of a moral/religious teaching on other grounds. Indeed, it would manifest an immoral form of “unbelief” (*Unglaube*), Kant says, to insist that we can accept morality's dictates only if they are authenticated by miracles.

So far, then, the texts seem to favor a firm and unqualified “No” in answer to our titular question. However, in spite of his commitment to the inviolability of the Causal Principles and the dispensability of miracle stories, Kant also manifests—in the *Religion*, the Kiesewetter fragment, and various lectures and notes from the critical period—a surprising openness to the real possibility and historical actuality of empirical miracles. In *Religion*, for instance, he says that “reason does not dispute the possibility or actuality” of miracles (R 6:52) and that it is “entirely conformable to the ordinary human way of thinking” for a new religion—even one based on “the spirit and the truth (on moral disposition)”—to announce or “adorn” its introduction with miraculous feats (R 6:84). He goes on to suggest that it is plausible that the work of a “prophet” or “founder” of a new religion would be *full* of miracles (thus helping to win adherents from the old religion), and that the historical testimony to these miracles itself would be miraculously arranged and preserved: “It may well be (*es mag also sein*),” Kant writes, that the founder's “appearance on earth, as well as his transition (*Entrückung*) from it, his eventful life and his passion, are all miracles—indeed that the history that should testify to the account of these miracles is itself a miracle” (R 6:84–85).¹³

Similar claims are found throughout the critical lectures on religion and metaphysics. Kant obviously had Leibniz and Wolff in mind, for instance, when he taught that providence

metaphysical principles that govern matter as we conceive it. My suspicion is that Kant would not regard such matter as something we could possibly experience, and thus would not think of it as part of nature in the relevant sense. But the point deserves further consideration.

¹² See Chignell (2010) for an expanded discussion of these issues in Part II.2 of *Religion*.

¹³ For the suggestion that there is some Humean “sarcasm” in Kant's comment here, however, see Ameriks (2014).

sometimes determines in accord with his aims that individual occurrences *should not correspond to the order of nature*. For it is not at all impossible, even in the best world, that the powers of nature may sometimes require the *immediate cooperation of God* in order to bring about certain excellent ends. It is not impossible that the Lord of Nature might at times communicate to it a *complementum ad sufficientiam* in order to carry out his plan. Or who would be so presumptuous as to want to cognize how God can achieve everything He has planned for the world in accordance with universal laws and without his extraordinary direction? . . . Such *exceptions to the rules of nature* (*Ausnahmen von den Regeln der Natur*) may be necessary because without them God might not be able to put many great aims to work via the normal order of nature (*nach dem gewöhnlichen Laufe derselben*). (Pölitz 28:1112, my emphasis)

Similarly:

No world can be thought without deficiencies, without certain negations and limitations, and thus to make up the defect of nature, miracles are possible in the best world also, and even *probable* according to the concept of God's goodness and truth. (*Mrongovius* 29:871, my emphasis; see also *Dohna* 28:667ff, *Anon-K₂* 28:732ff, and *Beweisgrund* 2:210–211).

Kant typically describes miracles this way in his lectures—as highly unusual events involving a “complement” from outside of nature that, together with the ordinary powers of finite things, is sufficient for effects that accomplish divine purposes. “God’s miracles in the physical world” thus result from his “cooperation with occurrences in the sensible realm (*Mitwirkung zu den Begebenheiten in der Sinnenwelt Wunder Gottes in der physischen Welt sind*)” (Pölitz 28:1106). Without such divine complementation, the normal, natural powers of finite creatures would be insufficient to produce the intended effects.¹⁴

4 Causes, Laws, and Complements

Now that we have Kant's concept of empirical miracle before us, as well as a sense of the textual situation, we can return to our original question:

¹⁴ “A concursus of God with events in the world is not impossible, however; for it is always conceivable that a natural cause be insufficient in itself to accomplish the bringing forth of a certain effect. In this case God would give it a *complementum ad sufficientiam*, but insofar as he does that, he *eo ipso* does a miracle (*Wunder*); thus we call it a miracle when the cause of an event is supernatural, which it would be if God as *concausa* cooperated in the bringing forth of the effect” (*Volckmann* 28:1209).

how can *any* of this fit with the broader Kantian picture of nature as a deterministic system governed by the Causal Principles and the mechanical laws? “On Miracles” represents Kant’s most detailed attempt to answer this question. We have seen that he starts by saying that the “general laws of nature” are indeed inviolable. He goes on to distinguish, however, between two species of *miraculum rigorosum*: the “material” and the “formal.” A material miracle would be an “immediate effect of the divinity,” whereas a formal miracle has a cause in the world, but one whose “determination takes place outside the world.” Kant’s meaning here is hardly transparent, but he does offer this illustration:

If one holds the drying of the Red Sea for the passage of the children of Israel to be a miracle, it is a *miraculum materiale* if one takes it to be an immediate effect of the divinity, but a *miraculum formale* if one lets it be dried out by a wind, but a wind sent by the divinity. (*Kies* 18:321–322)

Material miracles are immediately dismissed on the grounds that they would involve the direct introduction of new motion (force), and that this would be opposed to the third law of mechanics, i.e., the application of the Third Analogy principle to our empirical concept of matter (4:544):

Now if a motion were effected by a miracle, then, since it would not stand under the law of effect and counter-effect, the *centrum gravitatis* of the world would be altered by it, i.e., in other words, the world would move in empty space; however, a motion in empty space is a contradiction, it would be a relation of a thing to a nothing (*eines Dinges zu einem Nichts*), for empty space is a mere idea. (*Kies* 18:321; cf. *Refl* 18:419 [R5997])

Given this rejection of immediate or “material” miracles, it seems likely that Kant’s account of miracles will not satisfy enthusiasts, literalists, and others¹⁵ who suggest that omnipotence can insert new spatio-temporal events into the world *ex nihilo*, without regard to the Causal Principles or the mechanical-dynamical specifications of them.

That said, Kant also explicitly remains open to “formal” miracles in the Kiesewetter fragment. The idea, it seems, is that God sets up the world in advance (this is what he calls a “preestablished” formal miracle), or even intervenes on a particular occasion (an “occasional” formal miracle),

¹⁵ In conversation about these ideas, Lucy Allais encouraged me to consider a more radical model according to which God violates even *transcendental* principles by producing empirically-uncaused phenomenal events. Her reasoning was that *if* Kant is going to allow miracles at all, they may as well be *real miracles*. I understand the sentiment, but setting philosophical issues aside it seems clear from some of these passages, especially in *Über Wunder*, that Kant (surrounded as he was by spirit-seeing and miracle-reports) would not have found this move attractive.

such that “the power is in the world, but its determination takes place outside the world” (*ibid.*).¹⁶ Kant emphasizes here and elsewhere that such occurrences must be rare: it would be a serious imperfection in the world if providence had to add a “complement” to lots of finite causes in order to get the world that it wants. Still, the world might be set up such that, on rare occasions, the exercise of certain finite powers is accompanied by an extraordinary complement from “outside of nature”—i.e., a “determination” that exceeds anything in the powers of the relevant substances, but one that is necessary to accomplish the divine purpose. Thus, for instance, a wind that would normally cause a few whitecaps can be “complemented” in such a way that the entire sea parts; likewise, the anti-inflammatory powers of skin and hair that would normally resist fire only briefly can be “complemented” in such a way that a human body survives the Babylonian furnace.

Note that Kant’s way of telling the story explicitly retains the “form” of lawfulness: all alterations do have (partial) empirical causes, and all spatio-temporal objects are indeed in reciprocal interaction.¹⁷ But in these extraordinary cases, the natural powers of finite things are only *part* of the total cause; the other part is the complementary determination—the extra boost—that comes from outside the empirical nexus. Only the *total* cause—the natural powers together with the supernatural complement—is “sufficient” for the effect (see *Volckmann* 28:1209).

What should we make of this model? For starters, it seems to entail that the Causal Principles do not guarantee that all alterations have empirical causes that are *sufficient by themselves* to produce them. For, again, on these extraordinary occasions a complement from outside nature is required to achieve the effect. This is consistent with the letter of the Second Analogy principle, however, which says simply that empirical alterations follow from their causes in accordance with a rule (see A 188). Perhaps Kant’s idea is that in such extraordinary cases, natural phenomena are *part* of the total cause, and there is indeed a rule involved, but the rule makes reference to the complementary boost (“determination”) that the empirical cause receives from “outside the world.” The fact that it makes such reference is presumably why he also says we *cannot* even in principle grasp the “laws” by which miracles occur.¹⁸ In this way, they differ from merely comparative

¹⁶ It is unclear to me what we should make of the difference between “preestablished” and “occasional” in a transcendental idealist context. My best guess is that a preestablished miracle is one that is willed prior to consideration of the choices of finite agents, while an “occasional” one is performed subsequent to or in response to those choices. But note that in R5997, Kant seems to deny the possibility of “occasional” miracles altogether in favor of preestablished ones (*Refl* 18:420).

¹⁷ For the distinction between the form of causal lawfulness and the empirical “matter” of particular moving forces, see A207/B252.

¹⁸ “In general, an event in the world whose laws human reason cannot at all cognize is a miracle” (*Dohna* 28:667).

miracles, which are naturalistic events whose laws we do not in fact but in principle *could* understand.

But even if the Second Analogy principle is untouched, we might still worry that there is a tension between the present model and the principle of the Third Analogy, especially as extended to the concept of matter in the third mechanical law: “in all communication of motion, action and reaction are always equal to one another” (4:544). For it is unclear how such a miracle could occur without introducing action that has no reaction into the system. In other words, even if its occasion is the exercise of finite natural powers, God’s addition of a complementary “determination” (strengthening the power of that Egyptian wind, for instance) seems to threaten the mechanical conservation laws just as much as God’s directly parting the sea by fiat would. The complement is not, presumably, a mere change in the direction of the winds (à la Descartes’ immaterial mind changing the “direction” of the pineal gland’s vibrations without adding new motion); rather, it is a substantive *Mitwirkung* that adds something new.

Apart from what was quoted earlier about the *centrum gravitatis*, the Kiesewetter fragment and other texts pass over these issues in silence, as far as I can see. In keeping with the rather speculative character of this model, however, we might surmise that Kant’s God sets things up such that, on the occasion of a formal miracle of this sort, a reaction equivalent to the quantity of motion or force contributed by the complement is also simultaneously added, and the overall principle is preserved (and the *centrum gravitatis* of the world remains unmoved!). In effect, the divine complement to the action of finite powers would be accompanied by a divinely-contributed reaction (“the Lord giveth, and the Lord taketh away”). Kant at least hints at this in a note from the 1780s: “Neither through a miracle nor through a mental being can a motion be brought about in the world, without producing just as much motion in the opposite direction, in accordance with the *laws of action and reaction in matter*” (*Refl.* 18:419 [R5997], my emphasis). This kind of *deus ex machina* move (not unheard of in the early modern period, of course) would at least allow the model to adhere to the letter of the *a priori* principles governing matter. And so neither the transcendental laws of the *Critique* nor their application to matter in the “metaphysics of corporeal nature” would be broken.

5 Particular Empirical Laws

We have seen that Kant grounds the fundamental lawfulness of the empirical world in transcendental arguments for the necessary and universal truth of the Causal Principles, as well as the realization of those principles in the empirical concept of matter. Significantly, though, Kant does not insist that these arguments show that these principles plus the much more specific or particular “laws” that we often seek in scientific inquiry must be able

to account for all the events in the empirical world. Nor does he claim that these latter “laws”—even the ones that would be described in an ideal science—can be *shown* to have the same universal, necessary, and exceptionless status as the *a priori* ones.

Particular laws, because they concern empirically determined appearances, cannot be completely derived from the categories, though they all stand under them. Experience must be added in order to know particular laws at all. (B165; see also A206–7/B252; A222/B269–70; *Judgement* 5: 179–80)

Empirically one can certainly discover rules, but not laws—consider Kepler in comparison to Newton—for to the latter belongs necessity, and hence that they are cognized *a priori*. But one *assumes* about rules of nature that they are necessary, and that *a priori* insight can be had into them, because only on account of that assumption can there be nature; for this reason one names them laws by anticipation. (*Refl* 5414, late 1770s, 18:176, my emphasis)

In light of this, there seems to be room in Kant’s picture for a variation on Leibniz’s distinction between the true, general order (the “law of the series”) that describes how nature *genuinely* operates, and the more specific or particular generalizations (what Leibniz calls the “subordinate maxims”) that *almost always* hold, but to which there can be the occasional exception. The latter generalizations are still called “laws” by both Leibniz and Kant: they comprise the best system of graspably simple and strong (if not comprehensive) generalizations concerning the properties of matter, and they are adequate to what happens in the vast majority of cases.¹⁹ The true law, however, is not simple or graspable in detail for Leibniz: we know only *that* it holds without exception. “Rigorous formal miracles” in this context would be events that are entailed by the general “form” or law of the series, together with the initial conditions, but would still count as exceptions to the particular, subordinate “laws” or “maxims.”²⁰

In support of the extension of this Leibnizean picture to Kant, consider the following passage, this one from the *Dohna* lectures of 1792–1793:

A miracle strictly defined is called **rigorous**. [How] is such a thing possible? Because there is an **extramundane**

¹⁹ For a discussion of the claim that the specification of laws involves the effort to balance both simplicity and strength, see Luck (2011, 138–140) and Lewis (1973, 74ff).

²⁰ Leibniz: “Thus, to speak more clearly, I say that God’s miracles and extraordinary concurrence have the peculiarity that they cannot be foreseen by the reasoning of any created mind, no matter how enlightened, because the distinct comprehension of the general order surpasses all of them. On the other hand, everything we call natural depends on the less general [subordinate] maxims that creatures can understand” (*Discourse on Metaphysics* §16; 1989, 49).

cause that has produced this order of things, and thus can produce another. A miracle is therefore possible in itself internally. . . . In general, an event in the world whose laws human reason cannot at all cognize is a miracle. (*Dohna* 28:667)

In *Religion* Kant says likewise that miracles are “events in the world, whose causes (*Ursache*) are such that their laws of action (*Wirkungsgesetze*) are absolutely unknown to us and must remain so” (R 6:86).

It is important to emphasize that the hierarchy here is epistemological: metaphysically-speaking, there is only one true, inviolable order of things. And while empirical events are *almost always* arranged according to the relatively simple, general patterns that we can cognize, that “subordinate” order is only an approximation. On occasion, it gives way to events that are part of a deeper order—one whose “laws of action” are *necessarily* unknown to us, at least in their specific details. Again, this is consistent with saying that we know *that* the latter order obtains and, for Kant, that it has the basic structure described by the metaphysics of corporeal nature. But it also leaves room for that order to entail events that count as exception to the usually-reliable particular “laws.”²¹ So there may be cases in which God “determines in accord with his aims that individual occurrences” that do “not correspond to the [subordinate] order of nature” are “worked into the course of the world (*in dem Laufe der Welt gewirkt*) in order to bring about some necessary aim of his” (*Pölitz* 28:1110–1112). Provocatively enough, Kant even suggests in *Religion* that we may all be witness to some of these miracles, though not under that description:

Nobody can have so exaggerated a conceit of his insight as to make bold to assert definitely that, for instance, the most admirable conservation of the species in the plant and animal kingdom, where every spring a new generation once more displays [the species] original and undiminished, with all the inner perfections of mechanism, and even (as in the vegetable kingdom) with all the always-delicate beauty of color, without the forces of inorganic nature, otherwise so destructive in the bad weather of autumn and winter, being able to harm the seed at that point—no one can assert that this, I say, is a mere consequence of natural laws, and pretend to **grasp** that the creator’s direct influence is not rather needed for it each time. (R 6:89n)

²¹ The fact that there is an explanatory gap between the fundamental order of nature (deduced in the *Critique* and the *Metaphysical Foundations*) and the particular empirical laws has been noted by other commentators as well. Regarding *Opus Postumum*, for instance, Eric Watkins remarks that “As Kant struggles with the problems that result from trying to account for much more specific features of matter, it is unclear that (or how) the categories are supposed to be of help in structuring Kant’s argument” (Watkins 2009, 21).

Note, again, that the model does not assimilate empirical miracles to “comparative miracles.” For the latter adhere to the *ordinary* particular “laws,” our ignorance of which is a contingent matter. Genuine empirical miracles, by contrast, do not adhere to all of the ordinary particular “laws”: they are exceptions involving the “creator’s direct influence,” and thus their principles are *necessarily* beyond our ken.

6 Maxims of Judgment

Rhetorically, Kant almost always moves from acknowledging the possibility of empirical miracles to emphasizing the utter uselessness of appeals to them. Even if such events are possible, he says, our necessary ignorance of their laws entails that we have no good “positive criterion” for them—a criterion that would reliably tell us when a miracle has occurred. This leaves reason “paralyzed”: “Nowhere in experience can we recognize a supersensible object, even less exert influence upon it to bring it down to us” (R 6:174).²² In order to avoid such paralysis, Kant says, those who would proceed scientifically must ignore the possibility of miracles and presuppose that any particular event is not the result of a special intervention into the causal nexus. In other words, for scientific and practical purposes we should presume that every empirical event has its total cause in the empirical world (R 6:88).²³ Kant continues the earlier passage about the wonders of spring in this way:

But these are experiences; for us therefore they are nothing other than effects of nature, and **ought** never to be judged otherwise. For this is what modesty requires of reason’s claims, and to transcend these bounds is presumptuousness and immodesty, even though in asserting miracles people often purport to demonstrate a humble and self-deprecating way of thinking. (R 6:89n)

A few pages earlier, Kant likewise says that “sensible human beings” who “do indeed theoretically believe in miracles” should not count on them in “practical affairs,” and judges mustn’t take them into account in courtroom situations (R 6:85–87). While governments and churches may find it useful

²² See Watkins (2010); Byrne (2007, 158ff). In *Religion* we are given the “negative criterion” that something “cannot be a divine miracle despite every appearance of being one” if it is “directly in conflict with morality” (R 6:87). The L_1 lectures (mid-1770s) are interesting in that Kant is reported to have floated a corresponding positive criterion: “The condition under which it is allowed to assume miracles is this: the course of nature does not coincide with moral laws. Thus imperfection is in the course of nature; it does not agree with the conditions which should concur as motives for the moral laws. Miracles are possible in order to complement this imperfection” (L_1 28:219).

²³ Cf. with the “first Rule concerning Miracles” laid down by the 17th century Newtonian Thomas Burnet: “That we must not flie to miracles, where Man and Nature are sufficient” (1691, section III, ch. viii; qtd. in Harrison 1995, 538).

to teach that revelations and miracles *have* occurred in ancient times, they must advise that it is unwise to expect them now. The motive behind these injunctions is baldly pragmatic: old stories about miracles won't cause much uproar, but rumors of new miracle workers could lead to serious civil unrest: "to want to *perceive* heavenly influences is a kind of madness (*Wahnsinn*) . . ." (R 6:174).

The discussion in Part Two of *Religion* concludes with the claim that there are only two principled maxims regarding miracles: we should either accept that they occur all the time "though hidden under the appearance of natural occurrences," or we should accept that they do not occur at all. The first maxim is "in no way compatible with reason," and so we must adopt the second. But, again, note that this is just a pragmatic "maxim of judgment," not a "theoretical assertion": Kant insists that it is really possible that empirical miracles occur.²⁴ The only claim about miracles that we must "dispute with all our might" is that they *authenticate* true religion, and that belief in them is somehow meritorious or pleasing to God (R 6:85).

This combined openness to the possibility of empirical miracles and skepticism about our ability to identify them is Kant's consistent position throughout the lectures, notes, and written materials in the critical period. It is not much changed since the pre-critical period: in 1763, he argued that, for scientific and practical reasons, exceptions to the "laws of nature" must be viewed as possible but "rare" and that, in general, philosophy and common sense indicate that "nothing is to be regarded as a miracle or as a supernatural event, unless there are weighty reasons for doing so" (*Beweisgrund* 2:108; see also *L*₁ [from the very early critical period 1770s] 8:217ff).²⁵

7 Conclusion

We have seen that, surprisingly enough, the answer to the question in the title of the paper is both No and Yes, depending on what is meant by "law." No, the principles deduced in the *Critique*—as well as the applications to our empirical concept of matter in the *Metaphysical Foundations*—cannot be broken, and we know that this is so *a priori*. But, yes, some of the more specific or particular "laws of nature" that would be part of an ideal

²⁴ The claim that our commitment to the exceptionless character of the natural laws is a mere maxim of judgment will seem scandalously weak to readers who extrapolate from Kant's claims about the universal and necessary status of the Causal Principles to a claim about the particular laws. Applied only to the latter, and in the context of the model sketched above, however, the scandal dissipates.

²⁵ A. T. Nuyen takes comments like these as grounds for interpreting Kant as a wholesale "empirical skeptic" about specific empirical miracles, and goes on to focus on what he regards as the "miracles" of teleology in nature as a whole, and of the highest good. See Nuyen (2002).

biology, chemistry, psychology, or physics can admit of exception, even though practically-speaking we must resist reports (via testimony or even our own senses) that such an event has actually occurred.

By way of conclusion, consider again the Kantian analysis of a miracle in the empirical world:

(K) *A miracle obtains when something that is not a part of nature purposively intervenes to produce an event in time that counts as an exception a particular empirical law.*

We might wonder whether this description is applicable, at least in principle, to some of the effects of *finite* agency as well. On its face this will strike any but the most extreme enthusiast as ridiculous, of course: how could *we* ground events that are exceptions to the laws of nature? But from an interpretive point of view, unfortunately, I think we cannot immediately recoil. For Kant suggests that we must accept (for practical reasons) that our free choices genuinely contribute to making the empirical world the way it is. Traditional interpretations of Kant's compatibilism read this as the claim that our noumenal choice somehow plays a role in grounding and determining the conditions that characterize the empirical world (see G 4:450ff).²⁶ But on the model sketched above, what happens in the empirical world is not *always* governed by the particular empirical laws. So is there a reason, on these traditional interpretations, to restrict the phenomenal effects of our freedom to what *is* governed by the particular laws? Or could our free choice just as well turn out to be the ground of a miraculous exception? The answer to the question hangs, it seems to me, on how we interpret the purposiveness condition in (K). According to Kant, a transcendently free choice is simply for or against the dictates of the moral law; our purpose in that context is not to produce any particular empirical event, much less a miraculous one. But could the empirical expression of such a purposive free choice still *as a matter of fact* be an exception to the particular laws? And would that count as a *purposive* production of *that event*? It is extremely hard to imagine Kant embracing this possibility, although it is also surprisingly hard to make a compelling textual or philosophical case against it. Kant's clearest recommendation is to remain agnostic: "[F]or theoretical purposes, as regards the causality

²⁶ "It must be noted, however, that according to the traditional interpretation of Kant's theory of free will, it is not absurd to suppose that we have the power to causally affect the laws of nature. Choices of maxims by agents *qua* noumena are the ontological substrates of both (1) the empirical-psychological events that constitute the choices of agents *qua* phenomena and (2) the particular causal laws that necessitate those empirical-psychological events. If choices of maxims by agents *qua* noumena had been different, then they would have had different appearances—that is, the empirical-psychological events that constitute the choices of agents *qua* phenomena would have been different, and the particular causal laws necessitating them would have been different too" (Vilhauer 2004, 727).

of freedom (and equally its nature) we cannot even formulate without contradiction the wish to understand it” (R 6:144).

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Quotations from Kant’s works are cited according to the Ausgabe der königlich preussischen Akademie der Wissenschaften (1902–), with the two editions of the *Critique of Pure Reason* cited by the standard [A/B] pagination, and all other works cited as [Abbreviation volume:page]. Here I have typically though not always used the translations in the *Cambridge Edition of the Writings of Immanuel Kant* (1998), the general editors of which are Paul Guyer and Allen Wood.

Abbreviations are as follows:

Anon-K ₂	<i>Transcriptions of metaphysics lectures from the early 1790s.</i>
Beweisgrund	<i>Der einzig mögliche Beweisgrund zu einer Demonstration des Daseyns Gottes</i> (1763.) <i>The Only Possible Basis for a Demonstration of the Existence of God.</i>
Dohna	<i>Transcriptions of metaphysics lectures from 1792–1793.</i>
G	<i>Grundlegung zur Metaphysik der Sitten</i> (1785), <i>Groundwork of the metaphysics of morals.</i>
Kies	<i>Über Wunder</i> (late 1780s), <i>On Miracles.</i>
KpV	<i>Kritik der praktischen Vernunft</i> (1788), <i>Critique of practical reason.</i>
KU	<i>Kritik der Urteilskraft</i> (1790), <i>Critique of the power of judgment.</i>
L ₁	<i>Transcriptions of metaphysics lectures from the 1770s.</i>
Mrongovius	<i>Transcriptions of metaphysics lectures from 1782–1783.</i>
MFNS	<i>Metaphysische Anfangsgrunde der Naturwissenschaft</i> (1786), <i>Metaphysical Foundations of Natural Science.</i>
Pölitz	<i>Religionsphilosophie Pölitz. Lectures on religious philosophy from the 1780s.</i>
R	<i>Religion innerhalb der Grenzen der bloßen Vernunft</i> (1794), <i>Religion within the Boundaries of Mere Reason.</i>
Refl	<i>Reflexionen</i> from Kant’s <i>Nachlass</i> (variable dates).
Volckmann	<i>Religionsphilosophie Volckmann. Lectures on religious philosophy from 1783–1784.</i>

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