1 What Is, for Kant, a Law of Nature?

1.1 Introduction

The concept of a law of nature plays a number of highly visible roles in Kant’s theoretical philosophy. For one, it allows Kant to provide an illustration of synthetic a priori cognition and the distinctive kind of transcendental argument he uses to justify it. The Second Analogy of Experience, which attempts to establish the necessity of causal laws for the possibility of experience, is perhaps Kant’s most famous example of such a synthetic a priori cognition and of the kind of justification he offers in support of it. For another, Kant thinks that laws of nature are important to science in various ways. For example, he thinks that empirical science involves empirical laws of nature, which depend for their apodictic certainty on a priori laws of nature that are established in the Critique of Pure Reason and the Metaphysical Foundations of Natural Science (4:469). And insofar as he thinks that science must be systematic, that is, a whole of cognition ordered according to rational principles (4:468), he ends up devoting significant resources (constitutive principles of the understanding, regulative principles of reason, and reflective principles of the power of judgment) to explaining how laws of nature can be discovered, related, and justified so as to satisfy the strict requirements demanded by his conception of science. Laws of nature are thus crucial to the metaphysics of nature that Kant envisions.

We can appreciate the various roles that laws of nature are called on to play in Kant’s philosophy only if we also have an accurate understanding of what his conception of a law of nature is. In the wake of Hume’s analysis, it is often assumed that a law of nature is an exceptionless regularity concerning types of events in nature (perhaps conjoined with a subjective expectation that this regularity will hold in the future) and that Kant accepts this minimal conception such that he can then assert and argue for his distinctive claims regarding the modal status of the laws of nature. This assumption can thus make it appear as if the crucial differences between Hume and Kant primarily concern whether causality
involves purely contingent regularities or rather some kind of necessary connection, and what non-question-begging argument Kant could offer in support of his claim to necessity. Yet it is worth stepping back from this assumption and the larger picture of which it is a part to consider whether such an interpretation of Kant’s conception of laws of nature captures what is truly most central to his view.

As it turns out, Kant’s explicit statements about what in general a law is consistently speak against such an interpretation.¹ What’s more, investigating the broader historical and philosophical tradition out of which Kant’s conception of a law emerged provides a further compelling reason to question this interpretation.² For this tradition contains two uses of the term “law” that, when taken together, present a challenge to the very idea of a law of nature, and one can view Kant as responding to this challenge in a novel way. One use of the term derives from the so-called natural law tradition, which asserts that moral obligation arises on the basis of natural law, where a natural law can be established only through the act of a (superior) lawgiver who governs (inferior) subjects by placing them under an obligation to perform certain actions. This conception thus assumes that natural law can apply only to beings endowed with reason and free will, since only such beings can understand the obligation that the law places them under, and can decide whether or not to obey that law.

A second use of the term “law” derives from the conception and practice of natural science in the early modern period and presupposes that natural science consists in the identification of a small number of mathematically precise laws of nature from which one can derive, e.g., the motions of bodies. Descartes, building on Galileo’s results, was influential in establishing this conception of laws of nature as a desideratum of scientific inquiry, and Newton’s *Principia* was often taken to represent its fulfillment for the realm of bodies.

Though each of these uses is perfectly intelligible on its own, if taken together, they reveal an important challenge to the very idea of a law of nature: How is it possible for a law to govern the inanimate objects found in nature? If no legislator enacts such a law or if many of the objects in nature are not rational and free beings and cannot therefore be obligated to act as the law demands, how can there be such a thing as a law of nature?

¹ This is not to deny that there is a disagreement between Hume and Kant on whether there are necessary connections in nature, but rather simply to claim that it is not the only or even most important distinguishing feature.

² For a different case against the traditional reading of the relation between Hume and Kant, see Eric Watkins, *Kant and the Metaphysics of Causality* (New York: Cambridge University Press, 2005), esp. chapters 4 and 6.
One natural response to this challenge would be simply to deny that the notion of law involved in the laws of nature is at all the same as that involved in natural law. If natural law requires that a law be established through the act of a lawgiver who governs subjects by placing them under an obligation to act in some way, then, one might think, natural law has nothing in common with the laws of nature, which cover inanimate objects that cannot be said to either obey or disobey, and one should therefore refrain from saying, as people are wont to do, that the laws of nature govern what happens in the world. Similarly, if the laws of nature determine what must happen in the world in every (non-miraculous) case, then, one might think, they have nothing to do with natural law, which is concerned instead with obligation and what ought to happen.

On either version of this response, the use of the term “law” is equivocal.

A second natural response to this challenge would be to assert that a univocal concept does in fact underlie both the concept of natural law and that of laws of nature, but that one of these concepts is simply not instantiated. For example, one could deny that the world is governed by laws of nature on the grounds that all observed regularities are not truly exceptionless since they obtain only with significant ceteris paribus restrictions, and are therefore not truly laws at all. Or one could argue that it is not necessary to posit a natural or moral law as such on the grounds that one can describe morality entirely in terms of obligations and permissions and thereby avoid all reference to the notion of a law that would be commanded by God, a strategy that might appear attractive, or at least fitting, in an age more secular than Kant’s own. Indeed, even in Kant’s own time, not all thought it necessary to invoke the notion of a moral law. Hume, to cite one notable example, never speaks of a moral law in either his Treatise of Human Nature or his Enquiry Concerning the Principles of Morals. Kant’s decision to interpret morality in terms of a moral law is thus important. That he places the moral law at the foundation of his practical philosophy in what he calls the metaphysics of morals is similarly significant.

4 Kant displays sensitivity to this kind of difference between domains by distinguishing “what does happen” (nature) and “what ought to happen” (morality) (B830).
6 Hume does repeatedly refer to laws of justice and civil law, but does not seem to conceive of morality in terms of a moral law.
Without denying the consistency or coherence of either of these two responses, I maintain that Kant pursues a different and, to my mind, more interesting option by articulating a concept of law that has a genuinely univocal meaning at its core, but one that can be instantiated in different ways in the theoretical and practical contexts of laws of nature and the natural or moral law. For as Kant remarks in the Introduction of the *Critique of the Power of Judgment*: “morally practical precepts, which are grounded entirely on the concept of freedom to the complete exclusion of the determining grounds of the will from nature, constitute an entirely special kind of precept: which are also, like the rules that nature obeys [gehorcht], simply called laws” (5:173).

But what is the content of the univocal concept of law that is involved in laws of nature and the moral law? The core meaning of law that is univocal between laws of nature and the moral law contains two elements. First, the concept of law requires an objective or necessary rule, where it is the element of necessity that constitutes its distinctive component. Second, a law can be valid only if a proper authority has prescribed it to a particular domain through an appropriate act. This core meaning of law is then instantiated in somewhat different ways in the different cases of laws of nature and the moral law. While Kant insists on every law being the result of a spontaneous legislative act (of, e.g., the understanding or reason), the notion of necessity takes on different forms in each case, since the laws of nature involve determination, while the moral law can give rise to obligation. In light of these differences, Kant is then in a position to respond to the challenge raised earlier by noting that the requirement that subjects must be rational and free to be governed by law obtains for the case of obligation, but not for determination, despite the fact that both involve a necessary rule that is the result of legislation, and, given the univocal concept of law he endorses, both allow for an appropriate sense in which the law can be said to govern subjects.

In the following, I begin (in Section 1.2) by presenting textual evidence concerning Kant’s generic conception of a law, arguing that it contains the elements of necessity and legislation just mentioned. I then turn (in Section 1.3) to a brief description of two seemingly unrelated contexts in which the term “law” is used in the early modern period—that of laws of nature in science and the natural law tradition—and state the challenge that these contexts pose if taken together. With that background in mind I turn (in Section 1.4) to describing how Kant’s generic concept of law is instantiated in his accounts of the laws of nature and the moral law so that I can then explain how these accounts help to provide a response to the challenge described above. What the discussion shows is that Kant’s description of law in terms of notions of necessity and an act
of legislation is consistent with different kinds of necessity (determination and obligation) obtaining in different contexts such that one need not appeal to a purely metaphorical sense of law in speaking of laws of nature. It also suggests that Kant’s conception of law is not an isolated and detachable element of his position, but rather is related to fundamental features of his overall philosophy.

1.2 Laws as Necessary Rules

Kant states explicitly what he understands a law in general to be in several prominent passages in his corpus. In the A-edition Transcendental Deduction, for example, he connects laws to rules as follows: “Rules, so far as they are objective, . . . are called laws” (A126). Since he thinks of objectivity as being opposed to subjectivity and as including necessity, this statement is consistent with the description of law that he had offered a few pages earlier (A113), according to which a law is a necessary rule. In addition, in the *Metaphysical Foundations of Natural Science*, Kant states that laws are “principles of the necessity of what belongs to the existence of a thing” (4:469). Insofar as a principle is a rule from which something else follows, this passage likewise provides a description of law that refers to necessity and a rule. What is new in this passage is that the necessity in question can pertain to the existence of a thing.

In the so-called Kaehler transcripts on moral philosophy, Kant provides a somewhat more detailed and official-sounding definition of law as follows: “Every formula that expresses the necessity of an action is called a law.” Again, the elements of necessity and being a rule (in the guise of a formula) are present, but this description brings out that necessity can also pertain to an action (and not only to the existence of a thing). Now Kant thinks of an action very broadly as the determination of a power in a substance to cause an effect (28:564–5). According to this definition, then, a law expresses the necessity of the action by which a substance causes an effect (i.e., determines the existence or change of state of another thing). Since Kant’s lectures on moral philosophy form the context for this definition, one might think that it is restricted to the volitional actions of human beings, but the very next sentence clarifies that the notion of law is intended to have broader application: “Thus we can have natural laws, where the actions stand under universal laws, or else practical laws. Accordingly, all laws are [either] physical

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Kant’s idea here is that a law involves a rule expressing the necessity of an action, where the substance responsible for the action and its necessity can be either an object in nature or what we might call a free agent. Though this idea would need to be filled out with various details in concrete cases, it is striking that the abstract notion of law at issue here has a univocal meaning at its core, one Kant describes in terms of a rule that expresses the necessity of an action or of what belongs to the existence of a thing.

In the B-edition Transcendental Deduction we find further evidence regarding Kant’s conception of law. There he says: “Categories are concepts that prescribe laws \textit{a priori} to appearances, thus to nature as the sum total of all appearances” (B163). Two points are of note here. First, the fact that Kant talks about the categories prescribing laws to appearances reveals that he is committed to the idea that law, even in a theoretical context, involves not just a necessary rule, but also the prescription, or legislation, of that necessary rule. Second, this passage reveals that Kant does not restrict his notion of law to the category of causality, as one might expect, but rather holds that it is relevant to all of the categories. Thus, even the categories of quantity and quality prescribe laws in the sense that they represent a necessary rule with respect to the objective properties of things, which fits with the passage quoted from the \textit{Metaphysical Foundations} above; the breadth of his use of the term “law” is thus consistent with his remark about necessity pertaining to the existence of a thing (and not just action and causality).

What becomes clear by considering several of those passages that read like definitions of law is that Kant is quite distant from a Humean conception that would define law in terms of purely contingent regularities of events. Instead, Kant’s position is closer, at least considered at this level of generality, to the rationalist position that has been developed in recent times by David Armstrong and Michael Tooley, who describe laws in terms of relations of necessity between universals. However, Kant’s account also involves the notions of action and legislation, which are not emphasized in these accounts, a fact that ought to give one pause before identifying Kant’s position too closely with them. To gain a

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8 Kant, \textit{Vorlesung zur Moralphilosophie}, p. 53.
9 See Chapters 3 and 10 in this book for more discussion.
11 See Chapter 2 in this book for a more detailed description of how Kant’s account of law differs from both empiricist and necessitarian accounts.
fuller understanding of Kant’s conception of a law, it is useful to consider two historical contexts in which the concept of law played an ineliminable philosophical role and to reflect on how Kant’s views can be seen as responding to the challenge that arises from considering them together.

1.3 The Natural Law Tradition, Laws of Nature in Early Modern Science, and a Challenge

One major tradition in practical philosophy, broadly construed, is often referred to by the term ‘natural law theory.’ The basic idea is that what is good for us, what our end is, what we ought to do, or what we are obliged to do is based on natural law as opposed to positive law or common law. This idea, or variants thereof, can be found among the ancients (including Aristotle and the Stoics), but is developed in greater detail first by Thomas Aquinas and then by Francisco Suarez, before being modified further by several early modern thinkers. Although there were intellectualist (or naturalist) versions of natural law theory, according to which natural law is determined solely by the divine understanding (and thus by the natures of things), and voluntarist versions, according to which natural law is due exclusively to the (potentially arbitrary acts of) divine will, it is instructive to consider the basic features of Suarez’s account. For his account is often interpreted as an attempt to forge a middle path between these two extremes, one that distinguishes nicely some central features that were regularly ascribed to natural law.12

Suarez agrees with the intellectualist that there is a basis in nature itself for an action being appropriate or inappropriate, independent of God’s willing the appropriateness or inappropriateness of that action. That is, an action is good, and one has a reason to perform it, simply on the basis of the nature of the action itself (including relevant circumstances), and the voluntarist is wrong to think that God could command, and thereby make good, any action at all, regardless of its nature. At the same time, Suarez agrees with the voluntarist that nature itself, or the appropriateness or inappropriateness of an action, cannot suffice to create an obligation to perform an action or to refrain from acting. That is, unlike the intellectualist, he thinks that if one is obligated to perform an action, then the obligation that prescribes the performance of that action must be created by an appropriate act of will of a superior, that is, of one with the

12 For a detailed discussion of Suarez’s theory of natural law, see Terence Irwin’s The Development of Ethics, vol. 2 (New York: Oxford University Press, 2008), chapters 30 and 31, pp. 1–69.
authority to generate an obligation that binds an inferior.\textsuperscript{13} For on his view, the lawfulness of natural law includes the notion of obligation, and obligation as such requires the command, or act of will, of a superior that places one under an obligation.\textsuperscript{14} In short, it is one thing for an action to be good (and for me to be motivated to do it simply because it is good) and quite another for me to be obligated to perform that act (and to be motivated to perform it because I am under an obligation to do it). The extra element that is involved in obligation beyond the intrinsic goodness of the action in question must derive, Suarez thinks, from an act of will of one who has the authority to bind me.\textsuperscript{15} Thus, according to Suarez’s intermediate position, natural law contains both a precept, which aims to realize our ultimate end, and an obligation to follow the precept. For that reason, natural law requires both the divine intellect and the divine will, the former to give the human will its proper direction (to what is truly our ultimate end) and the latter to give rise to its obligatory or binding force for us.\textsuperscript{16}

Natural law theory underwent significant changes with the onset of early modern philosophy. For example, Grotius is often interpreted as rejecting a teleological conception of natural law, while Hobbes based natural law on our interest in self-preservation (rather than on a broader conception of the good, as Aquinas and Suarez did), holding that commands generate obligations only insofar as they are associated with sanctions enforced by a superior power that motivate our compliance.\textsuperscript{17} Leibniz, Wolff, and Crusius then react to these further developments in complex ways.\textsuperscript{18} As a result, by Kant’s time, there is a rich philosophical tradition with sophisticated views on what law is, what natural law is, how

\textsuperscript{13} Francisco Suarez, \textit{On Laws and God the Lawgiver}, 8 vols., ed. and trans. L. Perena et al. (Madrid: Consejo Superior de Investigaciones Científicas, 1971–81): Law is “the act whereby a superior wills to bind an inferior to the performance of a particular deed” (Book I, chapter 5, §24). In Book I, chapter 6, sec. 4 of \textit{De jure Naturae et Gentium}, Pufendorf similarly defines law as a decree by which a superior obligates a subject to adapt his actions to the former’s command.

\textsuperscript{14} The Latin “lex” derives from “ligare,” which means “to bind.”

\textsuperscript{15} Thomas Aquinas holds that obligation is the result of an act of will by a superior on an inferior (see, e.g., \textit{Summa Theologiae} II.i.q104).

\textsuperscript{16} Suarez, \textit{On Laws and God the Lawgiver}, pp. 70 and 72.

\textsuperscript{17} For discussion of Grotius’s and Hobbes’s positions, see Irwin, \textit{The Development of Ethics}, vol. 2, chapters 32–6.

it relates to morality, and what is required for moral obligation. In light of this historical context, it is significant that Kant chooses to speak not only of morality, but specifically of a moral law, and that he views this law, when stated in the form of a Categorical Imperative, as giving expression to moral obligations; in the context of the natural law tradition, these views immediately give rise to questions about what the exact content of the law is, what its source is, and whence it derives its obligatory or binding force.\(^{19}\)

The notion of law was also a central topic when natural philosophy underwent a revolutionary change in the early modern period. In addition to the various social, cultural, and intellectual transformations that took place at the time concerning how scientific authority was established, maintained, and questioned, dramatic shifts were taking place in the content of natural philosophy: Heliocentric astronomy replaced geocentric accounts of the heavens; teleological schemes gave way to purely mechanistic models of explanation; mathematical physics challenged the primacy of theology; and the metaphysics of substantial forms and prime matter was rejected in favor of a seemingly more austere ontology of bodies in motion. Amid all this doctrinal unrest, however, a crucial change took place in the ultimate goal of natural science. Instead of trying to discover the essential features of substantial forms, the causal powers that such forms possessed, and the ends they tended to pursue, many natural scientists in the early modern period, especially those working in rational mechanics (a branch of mixed mathematics), hoped to formulate a small number of mathematically precise laws that could be used to predict the future state of the world with much greater exactness and certainty than had been previously possible. Galileo was an important initiator of this project with his discovery of the law of free fall, which contradicted Aristotle’s widely held account of the motion of bodies. However, Descartes played an especially crucial role insofar as he expanded the scope of scientific inquiry from finding laws of motion that would describe the states of a small subset of bodies (e.g., those in free fall) to discovering laws of motion that would hold for all bodies. As a

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\(^{19}\) For an argument that Kant was working in the natural law tradition, see Jerome Schneewind, “Kant and Natural Law Ethics,” *Ethics* 104 (1993): 53–74, esp. 60–4.
result, an important part of Descartes’s legacy is that discovering laws of nature came to be viewed as one of the primary goals of science.\textsuperscript{20}

Once one understands the centrality of laws of nature to the conception and practice of science at the time, one can see how several central features of early modern natural philosophy fell into place.\textsuperscript{21} For example, one major task of natural philosophy, conceived of in this way, lay in formulating laws of nature that would cover the widest possible range of phenomena. To accomplish this task for bodies, Descartes proposed three laws of motion along with several rules of impact meant to amplify these laws. Though the counterexamples that Leibniz and Huygens brought to light discredited Descartes’s particular formulations of the laws of motion, many natural philosophers (including Kant) simply took that as a challenge to formulate laws that would not suffer the same fate.\textsuperscript{22}

Indeed, one of the major accomplishments of early modern science was Newton’s formulations of three laws of motion, which were remarkably successful at describing the motions of bodies in various media and which could also be used to derive the law of


\textsuperscript{21} For a broader perspective on the shifts that occurred in the modern period and their implications, see the discussions in \textit{The Divine Order, the Human Order, and the Order of Nature: Historical Perspectives}, ed. Eric Watkins (New York: Oxford University Press, 2013).

universal gravitation, a single law that was able to cover the motions of all bodies, both celestial and terrestrial.

In addition, many natural philosophers at the time saw the need to provide a justification of the laws of nature that was not based on their empirical adequacy.23 For example, Descartes attempted to derive his three laws of motion from the immutability of God, while Newton referred to his three laws of motion as axioms, which at least suggests that they were to be viewed as self-evident (though Aristotelians would obviously have contested such a view).24 As it turned out, Kant was also quite interested in this aspect of natural philosophy, since the *Critique of Pure Reason* and *Prolegomena* attempt to provide a (transcendental) justification of the very notion of a law of nature, while the *Metaphysical Foundations* offer a priori justifications of his three Laws of Mechanics.25 As a result, the task of formulating and justifying laws of nature was central to natural philosophy at the time, and Kant was by no means alone in devoting significant attention to this task.

Given these two traditions, the central roles that they attribute to the concept of law, and the fact that Kant is clearly drawing on these traditions when he places laws of nature and the moral law at the center of his metaphysics of nature and morals (respectively), we can now see how an important challenge arises if one attempts to bring these elements together into a single coherent philosophical framework (as Kant does).

On the one hand, the early modern conception of the goal of science requires the formulation and justification of laws of nature, that is, laws that would govern the behavior of all bodies in nature. On the other hand, the natural law tradition is often held to require that (1) a legislator must be endowed with authority (e.g., on the basis of some kind of superiority) for a law to govern or have binding force, and (2) whatever is subject to a law must be a rational being who is aware of the law and its obligatory force and must be free to obey or disobey it, for only under these conditions is it appropriate to speak of obligation. Taking these two traditions together, significant challenges arise in how to understand the very idea of a law of nature. One is that not all natural philosophers at the time accepted that the laws of nature must have a legislator.26 As we saw above, Newton labeled the laws of motion axioms and, at least in the

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23 For discussion of the formulation and justification of laws of motion in the eighteenth century, see Chapters 5 and 6 in this book.
24 Passages in Newton suggest that these “axioms” can be empirically confirmed indirectly by way of their explanatory power with respect to the phenomena they can account for.
25 See Chapters 4 and 6 in this book.
26 Although Malebranche and Leibniz both hold (in different ways) that the laws of nature instantiated in the world depend on the will of God, there is still a difference between
context of the *Principia*, did not see the need to speculate further about their ultimate source, and Descartes thought that the laws of nature follow immediately from God’s immutability, which is an essential attribute of God, rather than from any legislative act of the divine will. A second challenge lies in understanding how the laws of nature could be said to govern inanimate bodies if such bodies lack the rationality and freedom required to be aware of the law and its binding force and to choose whether or not to obey them. In fact, Suarez is perfectly explicit about this second point: non-rational creatures “are not properly capable of the law, just as they are not properly capable of obedience either.”

For this reason, Suarez explicitly maintains that one can speak of laws of nature only in a metaphorical sense. In short, these developments generate a very basic question: Can one speak of a law of nature and mean it literally?

### 1.4 Kant’s Solution

Though one can, as noted above, answer this question in different ways, I maintain that Kant is in a position to develop an affirmative response that is also philosophically interesting, for he has at his disposal a concept of law that is univocal between the cases of laws of nature and the moral law even though it is instantiated differently in each case. To appreciate the main features of this response we must first understand better how the two components of the concept of law described above (in Section 1.2), namely, necessity and legislation, are instantiated in Kant’s specific accounts of the laws of nature and the moral law, beginning with the former.

The concept of necessity that is contained in the generic notion of law takes on a particular form in the case of the laws of nature. Specifically, the notion of necessity involved in the laws of nature is that of determination, which Kant understands as the positing of a reality or property to the exclusion of its opposite (1:391). The most straightforward illustration of determination would be a case of causal determination. For example, when one body communicates its motion to another in impact according to the Laws of Mechanics, the one body causally determines an acceleration in the other body just as the second body causally determines a corresponding deceleration in the first. It does so by acting what God wills and what God legislates, since the latter requires that further conditions be met.

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27 Suarez, *On Laws and God the Lawgiver*, 1 1.2.

28 Suarez, *On Laws and God the Lawgiver*, 1 1.2.
according to its nature (as an extended and impenetrable object endowed with a certain mass), by means of the exercise of its distinctive causal powers (e.g., its repulsive force), and such that its action is necessarily equal and opposite to the reaction of the other body (according to the Third Law of Mechanics). In this example, the body that serves as a cause determines, or makes necessary, the effect and does so according to the law of the equality of action and reaction, where it is this law that expresses the necessity of the actions that cause the precise changes that occur in the two bodies such that the acceleration and deceleration are necessarily equal. Though the notion of necessity involved in the laws of nature can be illustrated by an example of causal determination in this way, the notion is, as we saw above, more general. For insofar as the categories are defined as concepts that determine an object (B128–9), it will also apply to, e.g., the relation between a substance and its accidents, since in that case something is determined to be ontologically dependent just as something else is determined to be ontologically independent (yet without that determination being causal in any typical sense). Analogous points hold for the other categories. Thus, in the case of laws of nature, the notion of necessity involved is that of determination, understood broadly.

The second element that is contained in Kant’s notion of law is that of legislation. There must be some authority that enacts, brings about, or serves in some way as the source of the lawfulness of the law. In the early modern period, it was not unusual to disregard this feature of the laws of nature and to treat laws of nature as in some sense primitive. The fact that Kant takes the idea of legislation seriously is a striking feature of his position, and Kant recognizes it as such. For in the Prolegomena, he explicitly asserts that the understanding must legislate laws to nature a priori in the following terms: “even though it sounds strange at first, it is nonetheless certain, if I say with respect to the universal laws of nature: the understanding does not draw its (a priori) laws from nature, but prescribes them to it” (4:320).

Moreover, Kant’s argument for this strange-sounding claim provides important details concerning his understanding of the legislation of the a priori laws of nature and of the necessity that they entail. In the passage that leads up to this quotation, Kant argues that the only way to explain how we could have a priori cognition of nature (which we do in what he refers to as the pure part of natural science) is if there is a necessary

29 For a more detailed description of Kant’s model of causality, see Watkins, Kant and the Metaphysics of Causality, esp. chapters 3, 4, and 6.
30 Cf. the passage from B163 quoted in main text above.
correspondence between the laws of the possibility of nature and the principles of the possibility of experience.\textsuperscript{31} For if our cognition of these laws were to be derived from nature, our cognition would have to be a posteriori rather than a priori. But then Kant argues, in a second step, that these principles of the possibility of experience are themselves possible only on the basis of the activity of our understanding and its a priori laws. For the understanding must actively combine appearances into a single experience (i.e., into cognition of a single world) and it can do so only according to the laws that are inherent in it. Thus, our a priori cognition of the laws of nature is possible only on the basis of the a priori laws that the understanding uses to actively prescribe lawfulness to nature.

In this context it is striking that it is Kant’s characterization of the understanding as an a priori faculty of rules that allows him to hold the understanding responsible not for the empirical content of the laws of nature, but rather for their lawfulness.\textsuperscript{32} That is, by actively employing rules that are general, a priori, and constitutive of the possibility of experience, the understanding has the authority to determine that nature must be rule-governed; it gives rise to the lawfulness of nature, or the necessary conformity of nature to law (4:296). Thus, though the empirical content of empirical laws derives from the empirical natures of the objects that are found in nature, Kant makes it clear that the a priori content of the a priori laws, which is just the lawfulness of these laws (including their universality and necessity), derives from the understanding, since the understanding is an active faculty that is able to prescribe, or legislate, lawfulness to nature a priori.\textsuperscript{33}

In light of this account, it is relevant to note that Kant does not make a similar claim about sensibility. For example, in the Prolegomena, Kant asserts that sensibility too makes possible cognition of nature (though in its material rather than its formal sense), but he does not for that reason assert that sensibility is responsible for prescribing or legislating laws to nature, as he does with respect to the understanding. (Kant does on occasion refer to “laws of sensibility,” but these references do not state that sensibility prescribes laws.) The reason for the disanalogy lies, I suspect, in the fact that Kant characterizes sensibility in terms of

\begin{itemize}
  \item \textsuperscript{31}Kant’s most explicit statement of the argument is at 4:319–20. This passage is discussed in detail later in Chapter 11.
  \item \textsuperscript{32}In the third Critique, Kant emphasizes the importance of the principles of reflective judgment for the empirical content of empirical laws.
  \item \textsuperscript{33}That the laws of nature that are cognized a priori pertain to appearances and not things in themselves is possible, Kant holds, only because of the specific status of appearances (as things whose existence depends on human cognition).
\end{itemize}
receptivity, or passivity, whereas the understanding is spontaneous and active with respect to the functions on which its concepts and judgments rest, which makes it what Kant refers to as a “higher” faculty. In other words, it is in virtue of its spontaneous activity of combining representations into a single experience according to its own independent rules that the understanding is authorized to legislate to nature. As a result, not only does the understanding legislate laws to nature, but we can see that it does so because it acts according to its own a priori rules (by unifying the disparate appearances given through sensibility), which gives it the authority to legislate laws to the natural world.34

We can now turn to the moral law and to how it instantiates the two elements that Kant identifies as indispensable components of his concept of law. In this case, Kant is quite explicit about how the moral law (which he calls the law of freedom) involves necessity, providing one account of necessity that obtains for God, and another that holds for human beings:

Now the laws of freedom are either

1. purely necessary, or leges objective mere necessariae. These are found only in God, or
2. necessitating, necessitantes. These are found in man, and are objectively necessary, but subjectively contingent. Man, that is, has an urge to trespass against these laws, even when he knows them, and thus the legality and morality of his actions are merely contingent. (27:481)

Kant distinguishes here between objective and subjective aspects of the law, stating that the moral law is objectively necessary (for any purely rational being, such as God), but subjectively contingent for human beings (for whom it is possible not to act rationally). For this reason, the necessity of law for human beings is characterized as necessitation or necessitating rather than determination or determining. He explains further the special kind of necessitation that is involved in human action as follows:

The necessitation of an action by the moral law, is obligation; the necessity of an action from obligation, is duty. Necessity and necessitation are different: the former is objective necessity. Necessitation is the relation of a law to an imperfect will. In man, the objective necessity of acting in accordance with the moral laws is necessitation. Necessitation is making necessary. (29:611)

In short, the specific kind of necessity that the moral law entails for the actions of human beings is that of necessitation or obligation. Even

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34 Cf. §38 of the Prolegomena for a discussion of the necessity of laws that apply to mathematical objects. Kant is quite clear that the necessity of such laws derives not from the object represented in sensibility but rather from the understanding.
though we may decide not to act in accordance with the moral law, it still places us under an obligation to do so and is necessary in that sense; it is objectively what we ought to do.

The second element of the generic concept of law, namely, legislation, is also clearly present in Kant’s account of the moral law. It is a novel feature of Kant’s account of morality that practical reason is said to be autonomous in its legislation of the moral law. Though Kant’s doctrines of practical reason and autonomy are quite complex, we can, for present purposes, focus on two main features. First, reason is autonomous insofar as it is responsible for the content of the moral law, that is, for the kinds of actions that one is morally obligated to do or to refrain from doing. Reason’s responsibility for the content of the moral law is especially clear when it is expressed in terms of the universalizability of one’s maxim in the so-called Formula of Universal Law, since the universality of reason gives rise to the notions of universalizability and lawfulness in that formula.\(^\text{35}\) Thus, just as the understanding prescribes lawfulness to nature, reason legislates the universalizability, or lawfulness, of moral actions. Second, and more importantly, reason is autonomous in the sense that we can explain how the moral law has obligatory force for us, that is, how and why it can bind us.\(^\text{36}\) Part of Kant’s explanation derives from the fact that we view reason as a highest authority, one that is independent of and higher than other faculties, and part of his explanation of reason having that status is that it actively and spontaneously gives the law to itself. That is, the law is not imposed on one from without, but rather lies within and finds application to itself. Indeed, these two elements, the necessity of obligation and acts of legislation, come together when Kant asserts: “The act whereby an obligation arises is called an *actus obligatorius*” (27:261).\(^\text{37}\)

In light of these descriptions of how Kant’s accounts of the laws of nature and the moral law incorporate the two elements of his notion of

\(^{35}\) While the formula of universal law emphasizes the universality and thus rationality of the moral law, the so-called formula of the law of nature (“Act as if the maxim of your action were to become by your will a universal law of nature” (4:421)) draws even stronger parallels between the moral law and laws of nature.

\(^{36}\) In other domains, reason’s interests take on different forms, such as issuing regulative principles rather than legislating constitutive laws. See Part IV of this volume for discussion.

\(^{37}\) In fact, he goes on to provide a fuller description of how obligation arises as follows: “Obligation is divided into *positiva* and *naturalis*. The former has arisen by a positive and voluntary choice; the latter from the nature of the action itself. All laws are either natural or arbitrary. If the obligation has arisen from the *lex naturalis*, and has this as the ground of the action, it is *obligatio naturalis*; but if it has arisen from *lex arbitraria*, and has its ground in the will of another, it is *obligatio positive*” (27:261–2).
law, we are now in a position to see how he can respond to the challenge to the very idea of a law of nature described above. One aspect of the challenge concerned whether laws require a legislator, one endowed with the proper authority to enact laws. It is clear that Kant not only accepts but even insists on the idea that every law requires some kind of legislator who enacts, or authorizes, the law. Whereas many medieval thinkers were inclined to think of God as the legislator of the natural law (as reflected, e.g., in the Ten Commandments), what is distinctive about Kant’s position is that he ascribes the role of legislator to reason.38 Taken in the broad sense, as we have seen, reason legislates both the formal content (i.e., lawfulness) of these laws and the kind of necessity that is appropriate to each context. For it legislates what is universal (whether it be nature’s conformity to law or the universalizability of maxims) and it legislates something necessary, whether it be the necessity of (e.g. causal) determination or the necessity of obligation. Given Kant’s characterization of reason as an absolutely spontaneous and active faculty, which is therefore superior to all others, it has the authority that is needed to legislate both laws of nature and the moral law.

A second aspect to the challenge described above concerns what kind of being is governed by the law, and whether such beings must be rational and free. To appreciate the resources at Kant’s disposal in responding to this aspect of the challenge, it is important to recall that his notion of law can be univocal between laws of nature and the moral law precisely because the notion of necessity it involves is relatively abstract and can thus take on more specific forms in the case of the different kinds of laws – namely, determination and obligation. In light of this, we are able to see that Kant can agree that whatever is governed by a law must in fact be subject to the necessity it contains, but deny that every kind of necessity requires rationality and freedom of the subjects in question. Specifically, obligation requires the rationality and freedom of whoever is obligated, whereas determination does not. For obligation has two distinguishing features. First, obligation requires rationality since whoever is

38 Kant does occasionally claim that the moral law can be viewed as resulting from a divine command such that the moral law has an explicit legislator (5:129), but he is also quite clear that he rejects the voluntarist conception of divine law, since it is only insofar as God is rational that his commands are moral. (Kant is also clear that we should not take any divine promises or threats to be our motive for acting according to the moral law, since that would prevent our actions from having moral worth. See Eric Watkins, “Kant on the Hiddenness of God,” Kantian Review 14 (2009): 81–122. Also, though Kant ascribes the legislation of the laws of nature to the understanding rather than reason, he often views the understanding as a faculty that falls under reason in a general sense (as opposed to reason in the narrow sense, as a faculty that seeks the totality of conditions and thus the unconditioned).
obligated must be in a position to understand and evaluate the scope and force of the obligation as well as the content of the action in question. Second, it must allow for the possibility of deviations, and that requires transcendental freedom. Determination, by contrast, does not display either of these features. Thus, the requirement of rationality and freedom derives from features specific to obligation, rather than either determination or necessity.

If one accepts this line of reasoning, one can still say (as Kant does) that the laws of nature govern whatever objects are found in nature as long as these objects are subject to the conditions of the notion of necessity contained in the laws of nature, that is, whatever conditions are presupposed by determination. And there is a genuine sense in which bodies are subject to the necessity of the laws of nature. For, as we have seen above, when a body acts (e.g., by causing an acceleration in another body), its action, its behavior, is governed by laws that determine how it can and cannot act and what effects it can and cannot bring into existence. For example, Kant’s Second Law of Mechanics entails that a body cannot act on itself, and the Third Law of Mechanics dictates that when it acts on another, it must act in such a way that its action is equal and opposite to the action of the body on which it is acting. The actions of the relevant bodies are determined by, or subject to, the necessary rules expressed by the Second and Third Laws of Mechanics. Thus, what the laws of nature govern are the actions of objects in nature along with the effects that they bring about. If Kant’s account can be understood in this way, it can then make perfectly good sense to talk about laws of nature and how they can govern what happens in nature, yet without having to resort to either a metaphorical or an equivocal notion of law.

1.5 Conclusion

This response reveals two larger points. First, it provides a specific answer to the question posed in the title of this chapter, namely “What is, for Kant, a law of nature?” For we have seen that a law of nature is, for Kant, a rule, legislated by a spontaneous and active faculty, that expresses the necessity by which some objective feature of the world is determined. Second, we now have a broader and more insightful perspective on the importance of laws of nature in Kant’s theoretical philosophy. For we have seen that although the issue of necessary connections in nature is an important one, it represents only one aspect of a much larger set of interconnected issues involving (1) a generic concept of law that allows for different kinds of necessity (obligation and determination), (2) the specific conditions under which these different kinds
of necessity can obtain, and (3) the idea that necessity requires a legisla-
tive act of a very specific kind by a higher faculty. What this third point in
particular reveals is not that the notion of law is an isolated feature of
Kant’s position, but rather that Kant understands the notion of a law as
intimately connected to his analysis of what reason is capable of and thus
an important part of his Critical project. By considering what a law of
nature is, one is thus drawn into some of the most foundational issues in
Kant’s metaphysics of nature and freedom.39

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