

Rationalism and Necessitarianism

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Abstract

Metaphysical rationalism, the doctrine which affirms the Principle of Sufficient Reason (the PSR), is out of favor today. The best argument against it is that it appears to lead to necessitarianism, the claim that all truths are necessarily true. Whatever the intuitive appeal of the PSR, the intuitive appeal of the claim that things could have been otherwise is greater. This problem did not go unnoticed by the great metaphysical rationalists Spinoza and Leibniz. Spinoza's response was to embrace necessitarianism. Leibniz's response was to argue that, despite appearances, rationalism does not lead to necessitarianism. This paper examines the debate between these two rationalists and concludes that Leibniz has persuasive grounds for his opinion. This has significant implications both for the plausibility of the PSR and for our understanding of modality.

Metaphysical rationalism proclaims the truth of the Principle of Sufficient Reason (the PSR hereafter). The PSR says that everything has an explanation; there are no brute facts. There is a lot to say in favor of metaphysical rationalism. It is an intuitively plausible doctrine. It is the opinion of the ordinary person. It has been upheld by countless philosophers from Parmenides to Leibniz to the present day. Moreover, its competitors face serious problems.¹

But metaphysical rationalism itself faces serious problems of its own. Among them is that there appears to be a powerful argument from the PSR to necessitarianism, the claim that all truths are necessarily true. The PSR may have considerable intuitive appeal, but so too does the claim that things could have been otherwise.

My topic in this paper is the relationship between metaphysical rationalism and necessitarianism as it pertains to the debate on this subject between arguably the greatest metaphysical rationalists in the history of philosophy: Spinoza and Leibniz. Spinoza held that rationalism leads to necessitarianism.

Leibniz denied it. I would like to examine in some detail one of the accounts of contingency that Leibniz offered, the possibility *per se* account, and inquire into whether it can successfully allow the metaphysical rationalist to admit that things could have been otherwise while still adhering to the PSR.

This project is important for two reasons. First, although metaphysical rationalism has some supporters today, it is not a popular doctrine. The most powerful objection to it is that it leads to necessitarianism. If this is false, as Leibniz claims, then a reassessment of metaphysical rationalism is in order. Secondly, the account of modality that Leibniz develops in response to the threat of necessitarianism reduces what is possible to what is actual.² This combination of reductivism and actualism appeals to many philosophers today, but it has proven difficult to articulate an account that has both within the possible worlds framework that currently enjoys canonical status. Reflection upon Leibniz's account may provide us with useful insights into how such an account could be given. I hope that the present endeavor constitutes a small step toward such reflection.

1 From rationalism to necessitarianism

Spinoza believes that rationalism leads to necessitarianism and, as a rationalist, he embraces necessitarianism. He writes:

1p29: *In nature there is nothing contingent, but all things, from the necessity of the divine nature, have been determined to exist and act [operandum] in a certain way.*

Whatever is, is in God (by p15); but God cannot be called a contingent thing. For (by 1p11) he exists necessarily, not contingently. Next, the modes of the divine nature have also followed from it necessarily and not contingently (by 1p16); and they either follow from the divine nature insofar as it is considered absolutely (by 1p21) or insofar as it is considered to be determined to act in a certain way (by 1p28). Further, God is not just the cause of these modes insofar as they exist (by 1p24c), but also (by 1p26) insofar as they are considered to be determined to produce an effect. For if they have not been determined by God, then (by 1p26) it is impossible, not contingent, that they should determine themselves. Conversely (by 1p27) if they have been determined by God, it is not contingent, but impossible, that they should render themselves undetermined. So all things have been determined from the necessity of the divine nature, not only to exist, but to exist in a certain way, and to produce effects in a certain way. There is nothing contingent, q.e.d.³

This argument can be boiled down to its essentials thus:

1. Whatever exists (other than God) is a mode of God. (by 1p15)⁴
2. God exists necessarily. (by 1p11)
3. The existence of the modes follows from the divine nature. (by 1p16)⁵
4. The effects produced by the modes follow from the divine nature. (by 1p26)

5. Whatever follows from something necessary is itself necessary. (suppressed premise)
6. Therefore, there is nothing contingent.

The argument does not appear, at first glance, to rely upon the PSR. But appearances mislead. Several premises of this argument are propositions that Spinoza argues for by way of the PSR. Hidden in the background of this argument is Spinoza's metaphysical rationalism. To begin with, let us look at how Spinoza argues for the the first premise of this argument: the claim that everything other than God is a mode of God.

What is a mode? It is a way of being a substance. A substance is something that is causally and conceptually self-contained. That is, (1)there can be no causes of the existence of a substance external to the substance, and (2)having the concept of any substance does not require having the concept of anything else. Spinoza sometimes expresses this by saying that substances are "in themselves." As Don Garrett convincingly argues, inherence, as Spinoza understands it, is entails both causation and conception. Thus, self-inherence, or being in oneself, is true of something only if it is self-caused and conceived through itself.⁶ Modes are things that are caused by and conceived through a substance. That is, modes are in substance. According to Spinoza, there is only one substance: God. So modes are things that are caused and conceived through God. Spinoza also uses 'explains' and 'is conceived through' as synonyms.⁷ So God is self-explanatory and modes are explained by God.

Now here comes the PSR in disguise: 1a1 says that everything is either in itself or in another. That is, because inherence entails explanation, everything is either self-explained or explained by another. This is equivalent to saying that everything has an explanation. Modes are explained by substances. God is the only substance. Everything has an explanation. So, everything that exists (except God) is a mode of God. That is, everything is explained by God.

Consider next the second premise of this argument: God necessarily exists. In the demonstration of this proposition (1p11d), Spinoza explicitly argues from the premise that there is a cause or reason for everything that exists, and that if something doesn't exist, then there must be a cause or reason for its nonexistence. This obviously expresses something like the PSR, but it is explicitly restricted to the existence or nonexistence of things. Does this restriction narrow its scope beyond what is traditionally ascribed to the PSR? No. Whatever is, Spinoza tells us in axiom 1 of part 1, is a substance or a mode. This strongly suggests that modes are among what exists. So the existence or nonexistence of any substance or mode requires an explanation. Modes are ways of being a substance. So if a given mode exists, there is a substance that is that way. If a given mode doesn't exist, then no substance is that way. So, Spinoza's principle "There must be a cause or

reason for the existence or nonexistence of anything” can be paraphrased as “There must be an explanation for the existence or nonexistence of any substances and for the ways that those substance are or are not.” Thus Spinoza’s principle has a much wider scope than its explicit formulation might suggest. Indeed, it would be reasonable to surmise that, by Spinoza’s lights, there is nothing to which the principle does not apply. Spinoza then argues that nothing could cause God’s nonexistence. So, God must exist.

1p26, the fourth premise of my reconstruction, also depends upon the PSR. Spinoza argues that if God was not the cause of the essences of things, then essences could be conceived without God. But according to 1p15, everything is conceived through God. We have already seen that 1p15 depends upon the PSR. Spinoza then concludes that since what determines the effects produced by the modes must be something positive and both the existence and essence of things follow from God’s essence, that which determines the effects produced by something must follow from God’s essence.

Hence, we see that at nearly every step of Spinoza’s argument for necessitarianism, he presupposes the PSR.

Let us now turn our attention to how Leibniz views the relationship between the PSR and necessitarianism. Like Spinoza, Leibniz is a metaphysical rationalist. And at one stage early in his career, Leibniz was also a necessitarian. But in contrast to his unwavering commitment to the PSR, Leibniz’s commitment to necessitarianism was fleeting. He was aware of the argument from rationalism to necessitarianism. But instead of giving up rationalism, he sought to block the inference to necessitarianism.

There can be little doubt that Leibniz appreciated the pressure exerted by the PSR toward necessitarianism. Consider this argument as it is articulated by the young Leibniz, who is still at this point a necessitarian, in a 1671 letter to Wedderkopft:

Indeed, everything necessarily is resolved into some reason, and this cannot stop until it arrives at a first reason or else it must be admitted that something can exist without a sufficient reason for existing, and this admission would destroy the demonstration of the existence of God and many other philosophical theorems. What then is the ultimate reason for the divine will? The divine intellect. For God wills that which he understands to be the best and likewise the most harmonious, and he selects them, as it were, from the infinite number of all possibles. What then is the ultimate reason for the divine intellect? The harmony of things. And what is the ultimate reason for the harmony of things? [Leibniz here explains at length that the basis of the harmony of things resides in the essences of things, which are not created by God, but rather coincide with him.] Since, however, God is the most perfect mind, it is impossible that he is not affected by the most perfect harmony and thus to be necessitated to the best by the very idea of things. [...] Hence it follows that what ever happened, is happening, or will happen is the best and consequently necessary.⁸

Although Leibniz's argument differs from Spinoza's in that he argues from the premise that God creates the world because it is the best possible world, it too is based in part on the PSR. Moreover, it clearly rests implicitly on the premise that what follows from something necessary is itself necessary.

Both Spinoza's and Leibniz's arguments assume a number of premises concerning the existence and nature of God. Because of this, it is not rationalism alone that leads to necessitarianism, but rather rationalism in conjunction with a particular set of theistic assumptions. Perhaps, one might think, the rationalist can avoid necessitarianism so long as she also avoids certain brands of theism. This may be so, but, it should be noted that there is a powerful argument for necessitarianism from the PSR that assumes no theistic premises.⁹ Suppose for reductio that there are contingent truths. Let p be the proposition that states all of these contingent truths. There is a sufficient explanation for the fact that p . Either this explanation is a necessary truth or it is contingent. If it is contingent, then it is a conjunct of p . No contingent truth explains itself. Hence a conjunct of p cannot explain p . If it is necessary, then p is necessary because what follows from a necessary truth is itself necessary. Thus there are no contingent truths. If this argument is sound, then metaphysical rationalism forms part of the basis of an argument for necessitarianism quite independently of any theistic commitments. Of course, the argument assumes controversial premises such as the claim that there is a conjunction of all contingent truths and that such a conjunction cannot be explained by the conjunction of the explanations of its conjuncts. This is not the place to pursue these issues, but, to my mind, these assumptions are at least plausible enough to give pause to the atheistic metaphysical rationalist who wishes to deny necessitarianism.

We might be tempted to conclude then that no one can consistently hold true both the PSR and that things could have been otherwise. But such a judgment would be hasty. In fact, no contradiction follows from those two claims alone. In order to generate the necessitarian conclusion from the PSR, each argument considered above assumes that whatever follows from something necessary is itself necessary. Hence we have the following three claims, which against a background of certain assumptions, lead to inconsistencies:

7. Everything has an explanation.
8. Things could have been otherwise.
9. Whatever follows from something necessary is itself necessary.

All three are intuitively plausible. Which should we abandon? We have seen that Spinoza and the young necessitarian Leibniz both give up (8). The anti-rationalist gives up (7). In what follows, I wish to consider an account of contingency developed by Leibniz in the years directly after the above quoted letter to Wedderkopf. Leibniz believes, I shall argue, that this account of

contingency shows that the apparent conflict between these three is in fact an illusion created by an equivocation in the modal vocabulary used in (8) and (9).

2 Leibniz's rejection of necessitarianism

As we have noted, Leibniz's flirtation with necessitarianism was brief. Indeed, he comes to view necessitarianism as among the worst features of Spinozism. Exactly what did Leibniz find so repugnant about necessitarianism? An eloquent statement of his reasons can be found in the *Theodicy*, when he writes:

Spinoza [...] appears to have explicitly taught a blind necessity, having denied to the author of things understanding and will, and imagining that good and perfection pertain only to us and not to him. It is true that Spinoza's opinion on this subject is somewhat obscure [...] Nevertheless, as far as one can understand him, he admits no goodness in God, strictly speaking, and he teaches that all things exist by the necessity of the Divine nature, without God making any choice. We will not amuse ourselves here refuting an opinion so bad, and indeed so inexplicable. Our own is founded on the nature of the possibles. (T 173)

In this passage, Leibniz denounces Spinoza for teaching the following three doctrines: necessitarianism, that God does not choose when he creates the world, and, worst of all, that God is not morally good. In Leibniz's mind, these three claims are related. We see this when, later in the same work, Leibniz sets out three conditions on freedom:

- Spontaneity
- Contingency
- Intelligence

As Leibniz understands these conditions, an agent is free just in case it is the causal source of its action (spontaneity); alternative courses of action were possible (contingency); and the agent was aware of these alternatives (intelligence).

It is not difficult to see why, on the basis of this account of freedom, Leibniz thinks that Spinoza's necessitarianism entails that God is not morally good. Moral goodness pertains only to free agents. We do not praise or blame an action to the extent that it was unfree or compelled. Contingency is a condition on freedom. Because Spinoza denies contingency, he must also deny that any agent, including God, is free. So neither God, nor anyone else, is morally good. In short, Leibniz objects to necessitarianism on the grounds that it entails that God is not morally good. At the end of the passage quoted above, Leibniz refers to his "account of the possibles", which he claims allows

him to avoid Spinoza's evil opinion. He is referring to his doctrine of *per se* possibility, which shall be our topic in this section.

Leibniz has two main accounts of contingency: the *per se* possibility account and the infinite analysis account. The infinite analysis account is by far the more famous. It goes hand in hand with the conceptual containment theory of truth. According to that account of truth, every true simple affirmative proposition of subject-predicate form is such that the predicate is contained in the concept of the subject. The infinite analysis account of contingency holds that a proposition is necessary just in case it can be demonstrated by analysis in a finite number of steps that the predicate is contained in the subject; a proposition is impossible just in case it can be demonstrated by analysis in a finite number of steps that the predicate is not included in the concept of the subject, and a true proposition is contingent just in case it cannot be demonstrated by analysis in a finite number of steps that the predicate is contained in the concept of the subject. On this view, while every truth is analytic, not every analyticity is necessary.

There are a number of challenges that face this account of contingency. First of all, the conception of analysis on which it depends is obscure and Leibniz never succeeds in giving it anything more than a merely metaphorical explication. Why should we believe that predicates like 'crosses the Rubicon', which is satisfied by Caesar only contingently, will be at the end of an infinite chain while predicates like 'man', which are satisfied by Caesar necessarily, be at the end of a finite chain? It is, on the contrary, quite natural to suppose that more complex predicates are closer to the start of analysis than are more primitive predicates. Complex predicates are composed of more primitive predicates. So if analysis is a process of breaking the more complex into the simpler, one would think that if anything resided at the end of an infinite chain of analysis, it would be an utterly primitive predicate. But we have seen that some contingent predicates are very complex and some necessary predicates are relatively (and perhaps absolutely) simple. Leibniz says nothing to convince us that this is not the case. It is possible that Leibniz does not understand analysis to be a procedure whereby something complex is reduced to simpler elements. But then what is it? Leibniz gives us no indication of any alternative.

Moreover, the infinite analysis account appears to be inconsistent with the claim that concepts have their structures necessarily. Concepts could not have been otherwise with respect to their structures. For example, BACHELOR could not have failed to include UNMARRIED. But the infinite analysis account of contingency is committed to denying this. This can be shown as follows:

Start with a contingently true proposition of the form x is F .

10. F -ness is contained in the concept of x but this containment is not demonstrable by analysis in a finite number of steps. (from the def. of contingency)

11. Concepts have their structures necessarily. (supposed for *reductio*)
12. Necessarily (*F*-ness is contained in the concept of *x* but that *x* is *F* is not demonstrable by analysis in a finite number of steps). (10, 11)
13. Necessarily (*F*-ness is contained in the concept of *x*) but necessarily (that *x* is *F* is not demonstrable by analysis in a finite number of steps). (12)
14. Necessarily (*F*-ness is contained in the concept of *x*). (13)
15. That *F*-ness is contained in the concept of *x* is demonstrable in a finite number of steps. (14 and the def. of necessity)
16. That *F*-ness is contained in the concept of *x* is not demonstrable in a finite number of steps. (10)
17. Concepts do not have their structures necessarily. (15 and 16)

Thus it appears that the infinite analysis account of contingency fails to capture our intuitions about contingency. To see just how counterintuitive this result is, note that if concepts have their structures only contingently, then concepts must be individuated by something other than their structures. For example, if BACHELOR could have had a different structure, then there must be something more to being that concept than the set of conditions, individual necessary and jointly sufficient for the satisfaction of the concept, that we associate with it. But what else could individuate concepts? Their causal origins? Some special feature of its structure? None of these alternatives looks remotely plausible.

Perhaps of fuller understanding of Leibniz's understanding of the infinite analysis account of contingency can help resolve these difficulties. But, instead of pursuing this further, I propose that we switch our attention to Leibniz's second main account of contingency. I believe that this second account was ultimately more important to Leibniz and holds more promise of delivering a satisfying account of contingency. This account is often called the *per se* possibility account.¹⁰ According to this account, modalities are grounded in the essences of things. A substance is possible just in case it has a coherent essence. Here is a statement of this view from what is perhaps Leibniz's earliest treatment of this account of possibility:

Therefore, to the extent that the essence of a thing can be conceived clearly and distinctly (for example, a species of animal with an odd number of feet or an immortal animal), then no doubt it must be regarded as possible, and its contrary will not be necessary, even if its existence is incompatible with the harmony of things and the existence of God, and consequently excluded from the world [*nunquam locum in mundo habitura*] but will be *per accidens* impossible.¹¹

The idea expressed in this passage is that *per se* possible substances are those substances whose essences are coherent and hence clearly conceivable. In addition, Leibniz draws a contrast between what is impossible *per se* and what is impossible *per accidens*. And there is no *per se* possible substance such that its essence cannot be clearly conceived on account of internal inconsistency. A substance that is impossible *per accidens* is one which has

a consistent essence but its existence is ruled out by its incompatibility with something else, for example the existence of God. I should note that elsewhere in this work, Leibniz defines necessity not in terms of essence but in terms of clear conceivability. But, for him, these two formulations are equivalent. This can be seen by considering his definition of essence. In his *Studies on the Universal Characteristic* composed in the year just prior to the work quoted above, Leibniz offers the following definition of essence:

Essence is the distinct thinkability [*cogitabilitas*] of something.¹²

If the essence of a substance is what makes it thinkable or conceivable, then it would be natural to think that what makes something clearly conceivable would be clarity or consistency in the essence. So when Leibniz defines necessity as that the opposite of which cannot be clearly conceived, we may assume that he means that the opposite of something necessary does not have a coherent essence.

The account of *per se* modality so far developed raises a number of questions. Leibniz typically articulates his account in terms of the possibility and necessity of substances or things. Does the *per se* account of modality have relevance to the possibility and necessity of facts or propositions? What is more, in the above cited text, Leibniz says that the contrary of a possible substance is not necessary. While this calls to mind the standard way of defining the basic modal concepts in terms of one another,¹³ it is unclear how to make sense of the contrary of a substance. Take Leibniz's example of an animal with an odd number of feet. What is the contrary of this substance? An animal with a non-odd number of feet? A non-animal with an odd number of feet? A non-animal with a non-odd number of feet?¹⁴ And even if we were able to decide on one of these as the contrary it would be hard to see the relevance of the fact that such a substance is not necessary to the possibility of an animal with an odd number of feet. For example, suppose the contrary of such a substance is an animal with a non-odd number of feet and suppose that such a substance is not necessary. What would that tell us about the possibility of an animal with an odd number of feet? Nothing as far as I can make out.

The first step to resolving these puzzles is to note that for Leibniz, as for the majority of philosophers who rely upon the notion of a necessary being, a necessary being is a substance that necessarily exists. Similarly, a possible being is a substance that possibly exists. Every possible substance makes true a proposition of the form "x possibly exists" and every necessary substance makes true a proposition of the form "x necessarily exists." Presumably what Leibniz has in mind when he speaks of the contrary of a possible substance is not another substance but a proposition contrary to the proposition made true by the possible substance of the form "x possibly exists." This proposition is of the form "it is not the case that x possibly exists."

So far, it is clear that Leibniz thought that propositions of the form “there is a coherent essence e such that a substance that is e is not essentially not- F ” entailed propositions of the form “there is a possible F .” It is also natural to assume that Leibniz also believed that propositions of the form “there is a possible F ” entailed propositions of the form “there is a coherent essence e such that a substance that is e is not essentially not- F .”

Leibniz does not only speak of substances existing necessarily or possibly, but he modalizes other predicates as well. For example, he approvingly notes that Abelard “thought it can well be said that that man [who in fact will be be damned] can be saved, in respect to the possibility of human nature, which is capable of salvation, but that it cannot be said that God can save him, in respect to God himself, because it is impossible for God to do that which he ought not to do.”¹⁵ We might put Leibniz’s point, a man is possibly saved if he is not essentially not saved. Assuming that there is nothing special about this example, we can generalize thus: a substance s is possibly F just in case s is not essentially not- F . We can see necessary or possible existence as a special case of this general principle. A substance necessarily exists just in case it essentially exists and a substance possibly exists just in case it is not essentially nonexistent. Leibniz believes that, with the sole exception of God, all truths about the existence or nonexistence of possible substances are contingent. Thus he presumably believes that any substance with a coherent essence is not essentially nonexistent.

We can extrapolate from these considerations the following account. A substance is necessary just in case it exists essentially.¹⁶ A substance is contingent just in case it exists but not essentially. Similarly, a substance is necessarily F just in case it is essentially F . A substance is possibly F just in case it is not essentially not- F . And it is impossible for a substance to be F if it is essentially not- F .

We can also define possible worlds in terms of essences. A possible world is a compossible set of substances with a compossible distribution of accidents defined over them. A world-essence is composed of all essences belonging to that world.

In texts where *per se* modality is under discussion, Leibniz sometimes claims that the principle of contradiction is the basis of truths of possibility and necessity.¹⁷ One might interpret this to mean that all the truths about modality and essence are true purely in virtue of their formal characteristics. I think such an interpretation is either incorrect or Leibniz is mistaken about the relationship between his account of modality and the principle of contradiction. No doubt we can easily see one way in which the account of *per se* modality entails that the negations of truths about necessities entail contradictions. Suppose that all human beings are essentially rational. It follows that all human beings are necessarily rational. It follows from this that if some substance s is human, then s is rational. The denial of this statement entails a contradiction. Suppose there is a human that is not

rational. But from the fact that she is human we can infer that she is rational. So she is both rational and not rational. But notice that we are only able to derive a contradiction from the denial of the purported necessary truth by helping ourselves to a postulate about essence. The denial of that postulate is no more a formal contradiction than the claim that some bachelors are married is a formal contradiction. Thus there must be substantive truths about essences that cannot be derived from the principle of contradiction. It is therefore misleading for Leibniz to say that the principle of contradiction is *the* basis of the truths of possibility and necessity. It is merely *part* of the basis: only in conjunction with postulates about essence does the principle of contradiction yield the truths of necessity and possibility.

This brings us to the question, what is an essence? Leibniz says very little on this subject as it relates to the theory of *per se* possibility. It is true that in the *Discourse on Metaphysics*, where the *per se* possibility account is not under discussion, he identifies essences with complete concepts. But this cannot be the understanding of essence relevant to *per se* possibilities. The complete concept of any substance contains every predicate that truly applies to it. For example, Adam, because he is actualized by God when God selects this world for creation, satisfies the predicate 'is actualized by God.' Consequently, Adam's complete concept must contain that predicate. If we were then to identify Adam's essence with his complete concept, then his existence would be contained in his essence. In other words, Adam would be a necessary being. For the same reasons, it would not be possible for Adam to refuse the apple as the predicate 'accepts the apple' is included in his complete concept. And, although he vacillates on the matter, Leibniz's considered view is that the proposition that God creates the best possible world is necessary.¹⁸ How then is God's creation contingent, as it must be if it is free? It is contingent, according to Leibniz, because the proposition that the actual world is the best is contingent. But since it is true that the actual world is the best, the predicate 'is the best possible world' would be included in its complete concept. If complete concepts are essences, then that it is the best would follow from its essence. The conflict between these considerations and the *Discourse*, however, should not trouble us excessively. First of all, no one can accuse Leibniz of being overly meticulous in his use of philosophical terminology and we should not be surprised to see him use a single term in a variety of ways. Secondly, by the time of the composition of the *Discourse on Metaphysics*, Leibniz is already developing his infinite analysis account of contingency, and the demands of the *per se* possibles account are likely far from his mind.

Consideration of the difficulties that would ensue if we took essences to be complete concepts can lead us to see what Leibniz must say about essences if he is to avoid these difficulties. Clearly, as they figure into Leibniz's *per se* possibles account, essences must exclude some information about other substances. And the essence of a possible world must be

such that it is impossible to tell just by looking at any one world-essence either that it is the best or that God creates only the best. But it is not necessary to exclude both in order to avoid unwanted necessity. Likewise, with respect to individual essences, they must either exclude information about God's essence or information about other possible worlds. How can we decide what information to exclude? I favor an interpretation according to which individual essences exclude all information about any other substance.

We must be careful to distinguish between the kinds of information that are excluded from the essence of any substance and the kinds of information that is excluded from any possible world. Recall that on our interpretation of Leibniz's *per se* possibility account of modality, possible worlds are collections of compossible essences plus a compossible distribution of accidents over these essences. So possible worlds contain information that is not part of the essence of any substance. Indeed, whereas, I shall argue, essences must exclude all information about any other substance, possible worlds must contain information about substances that are not part of them. For example, as Adams notes, possible worlds must contain information about other possible worlds, since it is possible that non-actual human beings, for example, think about alternative possibilities.¹⁹ For similar reasons, possible worlds must contain some information about God. It is not necessary, as Adams rightly says, that possible worlds contain more information about other possible worlds or God than can be accounted for by thoughts of finite beings. But this information does not belong to the essence of any world, since no finite creature possesses such knowledge essentially.

We noted above that excluding information about God's nature and about other possible worlds are both individually sufficient to ensure that an essence doesn't entail existence. This observation has led some commentators to argue that essences exclude one but not the other kind of information.²⁰ Presumably, such commentators are partially motivated by the desire to attribute to Leibniz the weakest possible theory. No doubt, all else being equal, weaker interpretations are preferable to stronger ones for the same reason that, all else being equal, weaker theories are preferable to stronger ones. Nevertheless, including one but not the other kind of information from essences appears to me to be *ad hoc*. Why would essences of finite substances contain information about God but exclude information about other finite substances or *vice versa*? In contrast, the claim that essences exclude all information about any other substance is clearly principled and uniform. Moreover, there is good textual evidence for this interpretation. First of all, that the essences of individual substances exclude all information about any other substance is already strongly suggested by Leibniz's terminology. That he calls the possibility that derives from the essences of things *per se* possibility, strongly suggests that other substances are irrelevant to the essence of a thing. The essence of a thing pertains to how a thing is in

itself without relation to any other substance. This interpretation also finds confirmation in the following text:

[T]he explanation [*causa*] why some particular contingent thing exists, rather than others, should not be sought in its definition alone, but in a comparison with other things. For, since there are an infinity of possible things which, nevertheless, do not exist, the reason why these exist rather than those should not be sought in their definition (for then nonexistence would imply a contradiction, and those others would not be possible, contrary to our hypothesis), but from an extrinsic source, namely, from the fact that the ones that do exist are more perfect than the others.²¹

This passage makes clear that definitions do not contain comparisons with other things. For Leibniz, the definition of a substance is a representation of its essence. So, if definitions don't contain comparisons to other things, then neither do essences. This strongly suggests that essences contain no information about other substances. After all, it is hard to see how any information about another substance could fail to provide the basis of some comparison. Perhaps Leibniz only means to say that the essences of finite substances don't contain information about other finite substances, since it is the comparison of finite substances that leads God to choose one over the other.²² But no such qualification is made in this text.

What is more, other texts explicitly exclude information about a substance's causes from its essence.²³ (G II, 225) Leibniz writes in the Theodicy:

In a word, when one speaks of the possibility of a thing it is not a question of the causes that can bring about or prevent its actual existence; otherwise one would change the nature of the terms and render useless the distinction between the possible and the actual.²⁴

Only God can cause a substance to come into existence. So, essences must exclude information about God.

Similar considerations lead to an analogous treatment of possible worlds. Although they presumably contain information about how the various substances that they contain are related to each other, possible worlds must exclude enough information about other possible worlds so that their world-essence do not entail any conclusions about whether or not it is the best. Even more importantly, God's essence must not be a constituent of any possible world. This interpretation is confirmed by a number of passages. For example:

These things [some claims of Gabriel Wagner] would be true, taking the word 'World' so that it includes God too. But this usage is not appropriate. By the name 'World' is normally understood the aggregate of things that are changeable or liable to imperfection.²⁵

Beyond the world or aggregate of finite things, there is a certain One which is dominant.²⁶

When Leibniz speaks of possible worlds, he means to use ‘world’ to mean what it does when we say that a monk withdraws from the world. He withdraws from the realm of the finite and changeable. Thus when Leibniz speaks of a possible world he means something quite different from the possible worlds of the modal logician. The possible world of the modal logician are maximal in that every proposition is either true or false at every world. Not so for a Leibnizian possible world. They represent only created substances. God, his nature, and his decisions are not represented at any of them except insofar as the possible substances that constitute them include intelligent beings that have thoughts about God.

It is easy to see how possible world-essences exclude the requisite information about God and other possible worlds. Possible worlds are constituted by sets of essences with compossible distributions of accidents over them. No finite substance can essentially possess knowledge of which world is best or of God’s essence. If it did, then it would be impossible for such a creature to be ignorant of such things. The claim that every finite creature might be ignorant of such things is not implausible.

We are now in a position to see how Leibniz attempts to block the inference from rationalism to necessitarianism. Recall that each of the necessitarian arguments that we have considered, including the one put forward by Leibniz includes the following premise:

9. Whatever follows from something necessary is itself necessary.

On the understanding of modality developed in *per se* possibles account, (9) is arguably incoherent. Consider the sentence obtained by replacing every occurrence of a modal term with its explication in terms of essence:

9*. Whatever follows from something that exists essentially itself exists essentially.

Understood in this way (9) is arguably incoherent. If something exists essentially, presumably its existence follows from its own essence, not the essence of something else. But (9*) says that something’s existence both follows from its own essence and the essence of something else. Assuming that there is no overdetermination, this is impossible.

Now Leibniz does not claim that (9) cannot be used to express a truth. Rather, he thinks that the kind of necessity that (9) talks about is distinct from the kind of necessity involved in (8). Leibniz claims that

Impossibility is a twofold notion: that which does not have an essence, and that which does not have existence, i.e., that which neither was, nor is, nor will be because it is incompatible with God.²⁷

In this text Leibniz appears to claim that the concept of impossibility is *disjunctive*: something is impossible just in case either it does not have a (coherent) essence or it is incompatible with the necessary being. Consideration of others texts, which I shall discuss presently, suggest that Leibniz's considered position is that our modal vocabulary is *ambiguous* rather than disjunctive. Predicates like 'impossible' can be used to express lack of a coherent essence or incompatibility with something necessary. When something is impossible in the sense that it is incompatible with something necessary, Leibniz calls it impossible *per accidens* or hypothetically impossible.

So Leibniz regards the propositions expressed in (7)-(9) above as only apparently inconsistent. Here is how he would have us understand them.

7. Everything has an explanation.

8*. Not every truth or substance is necessary *per se*.

9**. Whatever follows from something necessary is hypothetically necessary.

Of course, even if Leibniz is correct in his assertion that modal vocabulary is ambiguous in this way, he has yet to show that the meanings normally expressed by (8) and (9) are accurately paraphrased by (8*) and (9**). Rather, he has merely shown that (8*) are (9**) are paraphrases of possible uses of (8) and (9). What is of real interest is whether when we originally accepted (8) and (9) what we accepted could be expressed by such paraphrases. I shall return to this question presently.

Leibniz develops the theory of *per se* possibilities especially to vindicate God's freedom and hence God's moral agency. Recall that, according to Leibniz, freedom is defined by three conditions: spontaneity, intelligence, and contingency. That there are essences of nonexistent substances and possible worlds built up out of them satisfies the contingency condition. That God, in his omniscience, has ideas which represent these essences and possible worlds satisfies the intelligence condition. That God's creative act is explained by the fact that he perceives the bestness of the actual world satisfies the spontaneity condition. This last point deserves further comment. Leibniz has an exceptionally intellectualist conception of the will. Consider the following passages taken from the work where Leibniz first systematically develops his account of *per se* possibilities:

To will is to be delighted in the existence of something.²⁸

What is to be delighted? To perceive harmony.²⁹

Leibniz, of course, acknowledges that agents often deliberate over alternatives more than one of which is harmonious and hence more than one of which is delightful. The agent doesn't will all of the alternatives merely because she perceives the harmony of each and hence delights at each. Leibniz's

view is that an agent wills the greatest apparent good.³⁰ So we should understand the above quoted texts as meaning that to will is to be more delighted in the existence of something more than by any alternative to it.

God's spontaneity resides in the fact that his creation of the world is an act of his will. His will is nothing more than the fact that he perceives that the harmony of the world is greater than any other. His will is free because he also perceives the relative disharmony of other worlds and so does not will them. This is why Leibniz believes that God's creation of the world deserves moral praise. God is aware of all possible worlds and he is aware of the relative goodness of all the possible worlds. He creates the actual world on account of his perception of its moral superiority.

Leibniz's metaphysical rationalism rules out the possibility that God possesses freedom of indifference. If God were indifferent between two worlds, then there could be no sufficient reason why he chose one over the other. God's creation of the best follows from his nature and the necessary existence of the set of all possible worlds. But the existence of the actual world is still contingent *per se*. Its existence is not entailed by its nature alone. Moreover, he chooses between *per se* possible alternatives. He compares worlds with respect to their goodness. He chooses the actual world because he sees that its the best. That is why his choice is voluntary and moral commendation can be awarded to his choice.

3 Spinoza and *per se* possibilities

I noted earlier that Leibniz criticizes Spinoza harshly for his necessitarian views and draws a sharp contrast between himself and Spinoza on the subject of possibility. Spinoza believes that his metaphysical rationalism commits him to necessitarianism. We have seen that Leibniz develops an account of contingency in terms of *per se* possibilities that is meant to be consistent with metaphysical rationalism. In this section, I would like to explore the relation between *per se* possibilities and Spinoza. Could Leibniz's theory of *per se* possibility offer Spinoza away out of his necessitarianism? Or are some fundamental features of Spinoza's philosophy at odds with the theory of *per se* possibility?

It is difficult to answer these questions with certainty. Spinoza was unaware of Leibniz's account of *per se* possibility and did not explicitly consider these questions. What is more, the aspects of his philosophy that bear on these questions are not always developed in such a way as to make obvious his commitments with respect to all of the relevant issues. Nevertheless, I shall argue that Spinoza is committed to number of claims that put pressure on him to reject Leibniz's account of *per se* possibilities and the vindication of divine voluntary action that Leibniz builds from it. Is this because Spinoza is the more consistent and uncompromising rationalist? No. I shall further argue that the features of Spinoza's philosophy that are in tension

with Leibniz's account of *per se* possibilities and divine voluntary agency are independent of his metaphysical rationalism.

As I have said, Spinoza is committed to doctrines that look to be in conflict with Leibniz's *per se* possibility account of contingency and the related account of divine voluntary agency. Nevertheless, Spinoza's philosophy is surprisingly consistent with some of the most important features of those two accounts. First of all, Spinoza believes that there are essences of non-existent things and that God has ideas of them. He writes:

The idea of singular things, or of modes, that do not exist, must be comprehended in God's infinite idea in the same way as the formal essences of singular things, or modes, are contained in God's attributes.³¹

The "nonexistent things" that Spinoza speaks of here are not substances; Spinoza believes that there is only one possible substance: God. All else is a mode of God. But controlling for their different opinions as to how many possible substances there are, Leibniz and Spinoza are remarkably close on this topic. Spinoza thinks that there are two kinds of essence: actual and formal. The actual essence of a thing Spinoza identifies with the ground of a thing's causal powers. With respect to a finite mode, the actual essence is its *conatus* or striving to persevere in existence.³²

The actual essence of a thing exists only when and where that thing exists. The formal essence of a thing, in contrast, does not depend upon or entail the actual existence of that thing.³³ Spinoza compares formal essences to the rectangles contained within a circle even when no such rectangle is delineated.

The formal essences of things are, as Don Garrett has argued, infinite modes of God.³⁴ To see this, first note that Spinoza argues that essences in general must be conceived through God because "whatever is" must be conceived through God.³⁵ In the demonstration of that claim, Spinoza refers to 1a1, which says that everything is either a substance or a mode. So if formal essences are to be counted among "whatever is", they must be modes of God. This interpretation is confirmed by 2p8 which says that formal essences are "in the attributes" of God and by 5p22 which says that the idea of the essence of the human body is "in God." Whatever is in a substance is, by definition, a mode. But if the formal essences are modes, they cannot be finite modes. Their existence is independent of the actual existence of the modes whose essence they are. So they do not come in and out of existence like finite modes do. Hence they do not have the "finite and determinate" existence characteristic of finite modes. Every mode is either finite or infinite (and consequently eternal). Hence the formal essences of singular things must be infinite modes. This interpretation is born out by 5p23 which says that "this idea, which expresses the essence of the body under the aspect of eternity" is "a mode of thinking [...] which is necessarily eternal."

Because Spinoza believes that God has an idea of every mode, he believes that God has an idea of every formal essence, even those that do not correspond to any actually existing finite mode.

The formal essence of a thing is the feature that an attribute has if the nonexistence of that thing doesn't follow absolutely or unconditionally from the nature of the attribute. There may well be things that don't exist but only because their nonexistence follows conditionally from the nature of the attribute in which their formal essence inheres—conditional upon, for example, the existence of other finite modes that are incompatible with them. This picture is strongly suggested by the comparison of formal essences to the undelineated rectangles contained in any circle. They point us to the features of the circle that are compatible with such rectangles being delineated.

It would appear that these formal essences are excellent candidates to play the same role as the essences that ground possibility in Leibniz's *per se* possibles account of contingency and the associated vindication of divine voluntary agency. There are, however, other features of Spinoza's philosophy which may prevent them from playing this role.

Let's look first at why Spinoza can't accept Leibniz's account of God's voluntary agency. On this particular question, I think there can be little doubt as to what Spinoza's position must be. To be sure, God has ideas of the formal essences of nonexistent modes, but he can't choose the best possible world built out of them. According to Spinoza, nothing can be good or bad for God. But, according to Leibniz's conception of the will, you can't will something unless it appears good to you. So God can't will anything (in Leibniz's sense).

Why does Spinoza deny that anything can be good or bad for God? The reason is that, first of all, Spinoza thinks that things are only good and bad only relatively. He writes:

As far as good and evil are concerned, they also indicate nothing positive in things, considered in themselves, nor are they anything other than modes of thinking, or notions we form because we compare things to each other. For one and the same thing can, at the same time, be good, and bad, and also indifferent. For example, music is good for the melancholy, bad for the mourner, and neither good nor bad for the deaf.³⁶

Here Spinoza says that good and evil are not intrinsic qualities of things. Rather they are relations between things. Elsewhere, he defines good as what is useful for self-preservation and evil as what impedes our efforts for self-preservation.³⁷ Nothing can help or hurt God. So nothing can be good or evil for God.

Hence God cannot create the actual world because it is best of all possible worlds and judge it to be best on account of its superior harmony. God cares not at all about harmony. It is entirely indifferent to him just as music is

indifferent to the deaf. But not, like in the case of the deaf person, because he has no perception of it. Rather he has no use for it.

If God is indifferent between all the ideas of formal essences, what is the reason that he causes some of them to correspond to actual essences but not others? It cannot be because he possess freedom of indifference. That would offend against Spinoza's metaphysical rationalism just as much as it would Leibniz's. Rather, Spinoza insists that the series of actually existing things follows from the divine nature.

This brings us to the second way in which Leibniz's account of contingency and divine voluntary agency is in tension with Spinoza's philosophy. There are reasons to think that Spinoza cannot accept the Leibnizian conception of essence according to which it excludes all information about other individuals. On this question, as opposed to the question of whether God can choose between alternatives on account of their relative goodness, it is difficult to arrive at conclusive answers. In order to do so, we would have to sort out some of the most difficult and vexing questions in Spinoza's metaphysics. Having acknowledged these difficulties, in what follows, I shall attempt to highlight features of Spinoza's metaphysics that might force him to reject Leibnizian *per se* possibilities.

First of all, note first of all that modes are, by definition, conceived through a substance.³⁸ There is only one substance, God, and everything that exist is either a mode or a substance. So, everything is conceived through God, even nonexistent things.³⁹ This is because the essences of nonexistent things are, as we have see, modes of God. So it is impossible to think about anything, including a nonexistent mode, without thinking about God. Indeed, it is impossible to think about anything without having an adequate idea of the infinite and absolute nature of God. The infinite series of finite things is an infinite mode of God.⁴⁰ Infinite modes follow from the absolute nature of God. In other words, the idea of any infinite mode follows from the idea of God's infinite and eternal nature. So, in virtue of conceiving anything at all, including a nonexistent mode, you must also have an idea that that entails ideas of all of the infinite modes, including the infinite series of finite things. For any formal essence, either there is an actual essence corresponding to it included in the infinite series of finite things or there isn't. In other words, Leibniz's account of *per se* modality according to which we can conceive of things through their essences alone in such away that no information about any other substance is entailed is impossible for Spinoza. Conceiving of anything other than God must be done in conjunction with an adequate idea of the infinite and eternal essence of God, which itself entails the infinite series of finite things.

Someone might object that my interpretation of Spinoza's relationship to *per se* modality must be mistaken because I claim that you cannot conceive of anything, including nonexistent things, without conceiving of God in a way that entails the entire series of actually existing things, but Spinoza says:

I. that the true nature of each thing neither involves nor expresses anything except the nature of the thing defined.

From which it follows,

II. that no definition involves or expresses any certain number of individuals.⁴¹

On the face of it, this text seems to contradict my assertion that the idea of the formal essence of a thing contains information that entails the existence or nonexistence of the thing. If we can tell what exists and what doesn't, we will know the extension of each kind and hence the number of individuals of each kind. And Spinoza appears to say in the above quoted text that essences don't tell you that. But, on closer examination, it is not entirely clear how this text should be interpreted. First of all, despite their ubiquity in his writings and seeming importance, Spinoza never defines 'involves' or 'expresses'. It is not at all obvious that the truth of sentences of the form ' x doesn't involve or express y ' is incompatible with the truth of sentences like ' x contains information about y ' or ' x must be understood through y '. But only if such sentences are incompatible does the above cited text pose a problem for my interpretation. Furthermore, there can be little doubt that Spinoza believes both that:

- The nature of each thing neither involves nor expresses anything except the nature of the thing defined.

and

- The nature of any mode must be conceived and understood through the nature of God.

So however 'involves' and 'expresses' are interpreted, it must be in such a way that these two claims are compatible. And this clearly makes trouble for *per se* modality. The theory of *per se* modality requires that contingently nonactual things be conceived through their essences alone. That is, it must be possible to think about such things without also thinking about other substances, including God as Spinoza understands him. Of course, on Leibniz's conception of God, it would indeed be possible to think about a possible substance and God without being in position to know whether or not the substance is actual, but for Spinoza it is not. This is because, as we have seen, the infinite series of finite things follows from the absolute nature of God and the idea with which we think about God is an adequate idea of his nature.

Another objection is that the interpretation I have offered conflicts with what Spinoza says about how the finite modes follow from God's essence. As Curley has emphasized, Spinoza claims in 1p28 that finite modes do not follow from the absolute nature of God, but only from God insofar as he is affected by some finite mode.⁴² That is, finite modes are caused by other

finite modes, that is, God insofar as he is affected by a finite mode. This being so, the adequate idea of God's infinite and eternal essence through which anything else must be conceived and understood is not the idea from which any finite mode follows. And hence we couldn't work out from that idea whether or not any possible finite mode exists.

In response to this objection, I would reaffirm a point made by Garrett against Curley: in Spinoza's idiom 'follows' does not denote a purely logical relation. Rather, one thing "follows" (*sequit*) from another only on the condition that there is a certain logical *and causal* relation between them. The infinite series of finite things certainly follows from God's absolute nature in this sense. But, in order to accord with 1p28, no finite mode can *follow* from the infinite series of finite things although each finite thing must surely be *entailed* by it.⁴³

We must now consider one final objection. I have argued that Spinoza has reason to reject Leibniz's account of contingency in terms of *per se* possibilities because, for Spinoza, essences cannot exclude information about God that entails the existence or nonexistence of a thing with that essence. But could Spinoza really have believed that in having an idea of anything at all we have adequate knowledge of the infinite and eternal essence of God and that this knowledge allows us to both know the essences of singular things and whether or not things with such essences exist? Did Spinoza really believe that we have knowledge of the existence or nonexistence of every finite thing about which we can entertain thoughts? Isn't such a claim beyond belief? Isn't it obvious that we sometimes think about possible things without knowing if they exist? Perhaps, but it will be instructive to compare these counterintuitive results to other consequences of Spinoza's epistemology and philosophy of mind. For example, it is uncontroversial that Spinoza thinks that we have an idea of every part of our body.⁴⁴ So we have ideas of the molecules that make up the tissue of our spleen. It is uncontroversial that Spinoza thinks that we have an idea of everything that happens in our body.⁴⁵ So we have an idea of the production of antibodies by our spleen. And it is uncontroversial that Spinoza believes that we have an idea of everything that causally interacts with us.⁴⁶ We therefore have an idea of the distant planets in other solar systems that exert gravitational attraction on our bodies. It is thus a hard fact about Spinoza's philosophy that he credits us with mental representations that contain information about things well beyond what common sense ascribes. So any interpretation of Spinoza faces a more general version of the challenge that my interpretation faces. How could Spinoza have believed such things?

Why does it seem obvious that we don't have mental representations that contain information about everything that happens in our bodies or about the existence or nonexistence of every possible thing? What justifies our confidence in this matter? One possibility is that we are justified in denying that we have such mental representations by introspection.⁴⁷ I am

not conscious of having any such representations, which perhaps provides some evidence that I have no such representations. Another possibility is that we are justified by inference from our own behavior. I do not need to postulate any such mental representations to explain my actions, and so I might infer that I have no such representations. Of course, introspection and inference from action are not infallible sources of justification. If I have such mental representations but they are unconscious, then introspection will not reveal them. And if I have such representations but they have little power to determine my actions, then inference from behavior or action will not lead me to them.

Many commentators who seek to construe Spinoza's thinking on these subjects as reasonable have stressed that Spinoza appears to distinguish between conscious and unconscious ideas.⁴⁸ Furthermore, Spinoza believes that among those ideas that are conscious, some are conscious to a higher degree than others. Moreover, he appears to link the degrees of consciousness of an idea to what that idea contributes to the mind's abilities to "do many things" And some commentators have argued that, for Spinoza, an idea is conscious in proportion to its "power of thinking."⁴⁹ The power of thinking of an idea is, according to Spinoza, the power that an idea has to determine my future states. So if I have mental representations that contain information about everything that happens in my body or about the existence or nonexistence of every possible thing, but those mental representations have little or no power of thinking, then, according to this interpretation, those representations are both unconscious or semiconscious and bear little or no responsibility for my actions. When I entertain the thought about a possible being and yet wonder whether it exists, I am in a state in which my representation of the thing's formal essence has a relatively high degree of power of thinking and hence a high degree of consciousness and the representation that contains information about the thing's existence or nonexistence has very little power of thinking and is hence unconscious or semiconscious and contributes little or nothing to my future thoughts and actions.

In some respects, such an interpretation makes Spinoza similar to Leibniz. On this interpretation, both philosophers think that our minds contain information about the entire series of finite things. And both philosophers think that this is not obvious to us because the mental representations that contain this information are unconscious or semiconscious. Where they differ is that Spinoza thinks that our minds contain this information in virtue of our knowledge of essences (in particular, God's essence) and Leibniz believes that our minds contain this information on account of universal expression between monads.

None of this puts Spinoza in a better position to accept *per se* modalities. The representations that bear information about the existence or nonexistence of possible things may be unconscious, semiconscious, or otherwise inaccessible, but they are none the less present in virtue of having

representations of the essences of things. Leibniz's account of *per se* possibilities requires that a thinker could not work out the existence or nonexistence of a merely possible thing merely by considering its essence no matter how good the thinker's epistemic position is with respect to its grasp of the essence. After all, God, who is omniscient and perfectly rational, coherently considers whether or not to actualize every possibility. In other words, each essence represents an genuine object of deliberation for God. It could not do so if God, in merely considering an essence, could already work out its actuality or nonactuality. While finite minds, on Spinoza's view, can fail to appreciate all of the consequences of their representations of an essence, it is only in virtue of such failure that the existence or nonexistence of a merely possible being can appear to be an open question for such a creature. And this clashes with central features of Leibniz's account of *per se* possibility.

It's important to note that the incompatibilities between Leibniz's *per se* possibles account of contingency and Spinoza's philosophy are not entailed by Spinoza's metaphysical rationalism. The first incompatibility relates to Leibniz's use of the theory of *per se* possibles in his vindication of divine voluntary agency. The main reason why Spinoza cannot accept that vindication is that it depends upon God seeing things as good and evil, better and worse. That is just what will is for Leibniz. So God can't choose (freely or otherwise) unless he sees things as good or evil. Spinoza thinks that harmony (for example) is only good relative to someone that it helps. God needs no help. So nothing is good relative to God. This thesis about the good is completely independent of Spinoza's metaphysical rationalism. It has to do with his naturalistic approach to the study of the world. Spinoza appears to think that the idea that the world contains objective values that are independent of interests is nothing but a superstition. He does not argue for this. It appears to be merely a basic assumption. So although Leibniz and Spinoza disagree on this point, it has nothing to do with whether or not metaphysical rationalism leads to necessitarianism. It does, however, relate to metaphysical rationalism in the following way. If you think, as Spinoza does, that nothing is good or evil for God, then the reason why God actualizes one series of formal essences rather than another must be because his nature entails it. If it was because he chose one rather than another, then he would need to possess freedom of indifference, a power ruled out by metaphysical rationalism.

The second incompatibility relates to Spinoza's understanding of essence, conception, causation, and inherence. Spinoza thinks that everything is in itself or in another. If something is in itself then it is conceived through itself. If something is conceived through itself, then it is self-caused. If something is not self-caused, then it is conceived through something else, viz., its causes. The important thing is that according to Spinoza the only things that can be conceived through themselves are self-caused. And self-caused things are necessary beings. This makes impossible conceiving contingent or merely possible beings in the way that the *per se* modality account demands. In

other words, it makes it impossible to conceive of contingent or contingently nonactual things without conceiving of their causes. Spinoza's reason for thinking this is connected to his metaphysical rationalism but not entailed by it. Spinoza thinks that for all x 's and all y 's, x is conceived through y just in case x is understood through y . He further believes that for all x 's and for all y 's, x is in y just in case x is conceived through y . So, if we think of explanation as the relation that produces understanding, his claim that everything inheres in itself or in another is equivalent to the view that everything is self-explanatory or explained by another. This is metaphysical rationalism and Leibniz excepts it. But Spinoza also infers from this and from the above stated equivalences that everything is conceived through that which explains it, that is, that through which it is understood. This is precisely the point where he and Leibniz disagree. It's hard to see how the equivalence of conception and explanation is demanded by metaphysical rationalism. This being so, I conclude that Spinoza and Leibniz's disagreement on this point is independent of the issue of metaphysical rationalism and so the *per se* possibility account of modality is consistent with metaphysical rationalism to that extent.

4 Is Leibniz changing the subject?

Many commentators have alleged that Leibniz's distinction between *per se* and hypothetical necessity is irrelevant to the objection from necessitarianism.⁵⁰ For example, Robert Sleigh thinks that Leibniz succeeds in showing that it is not true that whatever is entailed by something necessary *per se* is itself necessary *per se*. But this is, Sleigh complains, to change the subject. The original worry was that metaphysical rationalism entailed that everything is necessary in what Sleigh calls the "ordinary and metaphysical" sense. Who cares if not every truth is necessary *per se*? They are still necessary in the ordinary sense. By introducing *per se* modalities, the allegation goes, Leibniz has changed the subject.

Leibniz would chafe at Sleigh's characterization of hypothetical necessity as necessity in the "ordinary" sense. In fact, Leibniz would think that Sleigh has things totally backwards.

The modal vocabularies of natural languages are, Leibniz believes, ambiguous. A number of texts bear witness to this. Consider this text in which Leibniz is discussing an argument for the conclusion that damnation (salvation) of any arbitrary person is necessary:

This sophism is based on an ambiguity prevalent in all nations and languages, an ambiguity resulting from such common and seemingly clear terms as "must" and "cannot be otherwise" and the like.⁵¹

We have already seen what Leibniz thinks is the nature of this ambiguity. Modal words can be used to express meanings related to *per se* necessity or meanings related to hypothetical necessity. But Leibniz seems to think that ordinary modal discourse typically expresses meanings pertaining to *per se* necessity rather than hypothetical necessity. Consider the following texts:

[The necessitarian argument's] entire difficulty arises from a twisted sense of words. From this arises a labyrinth from which we cannot return, from this arises our calamity because the languages of all people have twisted into diverse meanings the words for necessity, possibility, and likewise, impossibility . . . and others of this kind by means of a certain universal sophistry.⁵²

And here is what Leibniz writes in the notes he took on Spinoza's *Ethics* where he is commenting on Spinoza's claim that nothing is contingent:

I myself use 'contingent' as do others, for that whose essence does not involve existence. [. . .] But if you take 'contingent' in the manner of some of the Scholastics, a usage unknown to Aristotle and to common life, as that which happens in such a way that no reason of any kind can be given why it should have happened thus rather than otherwise [. . .] then I think that such contingency is confused.⁵³

Here Leibniz clearly wishes to associate the *per se* possibles account of contingency with the kind of modality expressed by ordinary modal discourse and the kind of necessity expressed by modal vocabulary in the necessitarian argument with some kind of rarified Scholastic usage.

How does Leibniz try to justify his claim that the definitions of modal vocabulary comprised by the *per se* possibles account accords better with ordinary usage than do alternative definitions? Typically Leibniz merely asserts this. But on one occasion he offers the following argument. He says that in order to understand the meaning of modal vocabulary, one must look at how people ordinarily justify their modal claims. He observes that if something is conceivable, then it is judged possible. He concludes that, according to ordinary modal discourse, something is possible just in case it is conceivable. Now we know that Leibniz believes that an essence grounds the conceivability of a substance. And so we can, on that basis, infer that something is possible just in case it has a coherent essence.⁵⁴

This argument does not succeed. The ordinary practice of confirming possibility claims through conceiving of the alleged possibility doesn't tell us everything we want to know about the relation between possibility and essence. Leibniz appears to assume that the reason for this practice is that conceivability is grounded in essence. But this assumption is not entailed by the practice. Moreover, such ordinary practice does not show that, as the folk use modal vocabulary, conceivability entails possibility or is even coextensive with possibility. It just means that the ordinary person takes conceivability to be evidence of possibility. The evidence may be merely *prima facie*. If this

were true, then it would be false to say that, as the folk use the terms, to be possible is to be conceivable.

It is important to note that regardless of whether or not the modal notions described by Leibniz's *per se* possibles account are the notions expressed by ordinary modal discourse, Leibniz's intention is to give an account of those notions. If he fails, he is guilty of offering a failed analysis, not of changing the subject.

Despite Leibniz's failure to provide a convincing argument for his claim that the definitions of modal notions underwritten by his *per se* possibles account correctly give the meanings of modal vocabulary as it occurs in ordinary thought and talk, I believe that his account has a strong case for being an adequate account of modality. I shall provide reasons for this claim in the next section.

5 Is *per se* possibility serviceable?

Why do we insist upon contingency? Why does necessitarianism strike us as such a hopeless thesis? I can think of four main jobs that the concept of contingency is called upon to perform. I shall argue that there is some reason to be optimistic about the *per se* possibles ability to do the work that we require of modality.

One job is to allow that we could have done otherwise when we choose freely. This, more than anything else, is what interests Leibniz. In particular, he wants it to be the case that God could have done otherwise. Preemption cases à la Locke and Frankfurt are not at issue here. It is not part of Leibniz's account of freedom that an agent acts freely only if had her beliefs and desires had been different, she would have done otherwise. The falsity of that conditional is compatible with the claim that agents act freely only if they could have done otherwise. What is at issue is whether or not intelligent deliberation can take place. This requires objects of thought over which to deliberate. Possibilities are the relevant objects of thought. Leibnizian possibilities are designed specifically to do this job. Since they are built up out of coherent essences, they are intended to be "thinkable," and indeed I can think of no reason to doubt that they are. The possible worlds built up out of sets of coherent essences and coherent distributions of accidents over them provide agents with alternatives over which to deliberate. To my mind, this account of the sense in which a free agent could have done otherwise makes intelligible the tight connection between freedom and responsibility. A free agent is responsible for what she does because her action is deliberate. No doubt there are details to be worked out, but Leibniz's account appears to me to be a promising start.

Another job is to allow for a distinction between essence and accident. If all truths are necessary, then every object has all of its properties necessarily. If things couldn't have been otherwise, then Socrates had to have a snub nose,

teach Plato, and marry Xanthippe just as he had to have been a human being. It is very common for contemporary philosophers to use modal notions to distinguish essence from accident. An object is essentially *F* just in case it is necessarily *F* and accidentally *F* just in case it is possibly non-*F*. Possibility and necessity are taken to be primitive and essence and accident are defined in terms of them. Leibniz reverses this order of explanation. Essence and accident are taken to be basic and necessity and possibility are explicated in terms of them. An object is *F* necessarily just in case it is *F* in virtue of its essence and *F* contingently just in case it is *F* but not in virtue of its essence. Is there any reason to prefer one to the other? Kit Fine has argued persuasively that it will not do to define essence in terms of necessity.⁵⁵ Socrates is necessarily a member of singleton Socrates, but being a member of that set is intuitively not part of his essence. If we are to make use of the notion of essence at all, we must not define it in terms of *de re* necessity. Since we would thus have an independent notion of essence, perhaps we could define necessity and possibility in terms of essence and accident. In any event, if contingency is understood in terms of *per se* possibles, there is little danger that we shall lose the distinction between essence and accident. The distinction will be firmly ensconced in the ground floor of our theory.⁵⁶

Another important job is to allow for a distinction between lawlike generalizations and accidental generalizations. It is a law that electrons repel each other. It is not a law, although true, that all electrons stand in some spatio-temporal relation to Donald Trump. This distinction is often characterized in modal terms. Electrons have to repel each other. They do not have to stand in some spatio-temporal relation to Donald Trump. Trump exists only contingently. Had he not existed, then no electron would have stood in any spatio-temporal relation to him. This can be accommodated by the *per se* possibles account of modality. We could say that it follows from the essence or nature of any electron that it repels any other electron but it does not follow from the nature of any electron that it is spatio-temporally related to Donald Trump. What about laws that do not involve natural kinds, such as that all negatively charged things repel each other? It would not do to say that it is part of the essence of any negatively charged thing that they repel other negatively charged things. After all, many things are negatively charged only accidentally. But Leibniz follows a long tradition that goes back at least as far as Aristotle according to which essences are internal principles of change. Given the state of a substance, its essence partially determines its subsequent state. Assuming determinism, the idea is something like: given initial conditions characterized in terms of what substances there are, their essences, and their accidents, the essences tell the universe how to evolve. Leibniz sometimes puts the point by saying the laws of nature are inscribed in the essences of things. Lawlike generalizations are generalizations that are grounded in the essences of things.

Another important job is to allow for counterfactual reasoning. If the actual world were the only possible world, then all propositions that were counterfactual would also be counterpossible. But surely it makes sense to reason about what would be the case if I had taken a certain dose of cyanide. If all contrary to fact situations were impossible, to ask what would be the case if I had taken a certain dose of cyanide, the objection goes, would make as little sense as asking what would be the case if I were a prime number. But Leibnizian possible worlds clearly provide resources for evaluating counterfactuals. It is true that if I had taken a certain dose of cyanide then I would be dead. Leibniz can say that such a statement is made true by the fact that in the possible world most similar to the actual world in which I take a certain dose of cyanide, I am dead and this is true in virtue of my essence. That non-actual possible worlds are hypothetically impossible is of little moment. And indeed, we find Leibniz appealing to his theory of possible worlds when he gives his account of the truth conditions of counterfactual conditionals. He discusses the case of David who is fleeing from Saul. David asks God if he will be caught if he hides in Keilah. God says yes because the inhabitants of Keilah will betray him to Saul. What makes it true that if David hides in Keilah, its inhabitants will betray him to Saul? Leibniz writes:

I resort to my principle of an infinitude of possible worlds, represented in the region of eternal verities, that is, in the object of the divine intelligence, where all conditional futurities must be comprised. For the case of the siege of Keilah forms part of a possible world, which differs from ours only in all that is connected with this hypothesis, and the idea of this possible world represents that which would happen in this case. (T 42)

In other words, we go to the closest possible world where David hides in Keilah⁵⁷ and see if the consequent is true at that world. If so, then the conditional is true. It is not clear that the best accounts of counterfactual conditionals that we have today have deviated in any significant degree from Leibniz's own account. In any event, it is clear that Leibniz's account of *per se* possibility allows him to offer an interesting and plausible account of counterfactual reasoning.

All of these accounts make the notion of an essence bear tremendous weight. But they all seem to me promising enough that when it is pointed out that metaphysical rationalism leads to necessitarianism, the rationalist need not renounce his principles or shatter his teeth on any bullets. He can instead fall back on the notion of *per se* possibility, which might turn out, in the end, to be all the possibility we need.

Notes

¹ For one, the anti-rationalist has a demarcation problem. Where do we draw the line between the brute and the non-brute? Surely the placement of this line is not itself brute. But

explaining why it should be where the anti-rationalist claims it to be is no easy matter. See Michael Della Rocca, "The PSR," forthcoming in the *Philosopher's Imprint*.

² Although I speak of Leibniz's "account", in fact, he develops at least two distinct accounts of modality and both are reductive and actualist. But in this paper I shall focus primarily on only one of them for reasons that should become clear presently.

³ All citations from Spinoza are from *Spinoza Opera*, ed. C. Gebhardt, 4 vols. (Heidelberg: Carl Winter, 1925) (G hereafter). In citations from the *Ethics*, I use the following abbreviations: the first numeral refers to parts; 'p' means proposition; 'c' means corollary; 's' means scholium; e.g., 4p37s means *Ethics*, part 4, proposition 37, scholium. All translations of Spinoza and Leibniz's work from the Latin and French are my own.

⁴ Every thing is either a substance or a mode. Substances are in themselves. Modes are in another. God is the only substance (1p14), so anything that exists other than God is in God as a mode of God.

⁵ I omit Spinoza's qualification that the modes follow *necessarily* from the divine nature on the grounds that it is pleonastic. There is no use of 'follows' [*sequi*] in Spinoza that can be plausibly interpreted as a contingent relation.

⁶ "Spinoza's Conatus Argument," in Koistinen and Biro eds., *Spinoza: Metaphysical Themes*, (Oxford: Oxford University Press, 2002), pp. 136-137.

⁷ e.g., 2p38d.

⁸ Letter to Wedderkopf, 1671, A II, i:117; Sleight (2005), p. 3-4.

⁹ Versions of this argument have been advanced by William Rowe in his *Cosmological Arguments*, (Princeton: Princeton University Press, 1975), Peter van Inwagen in his *Metaphysics*, pp.119-122, and Jonathan Bennett in his *Study*, p. 115.

¹⁰ My understanding of the *per se* possibles account is deeply indebted to Robert Adams, *Leibniz: Determinist, Theist, Idealist*, (Oxford: Oxford University Press, 1994), pp. 10-21.

¹¹ A VI.iii: 128; Sleight (2005), p. 5

¹² A VI.ii: 487

¹³ According to a widely accepted definition a proposition *p* is possible just in case it is not the case that not-*p* is necessary.

¹⁴ I am grateful to an anonymous referee for urging me to consider these questions.

¹⁵ T 171

¹⁶ There is more to be said about essential existence, but Leibniz's understanding of the relationship between essence and existence is a complex matter that is beyond the scope of this paper. See Adams, 1994, cap. 6.

¹⁷ For example, in "Freedom and Possibility," AG 19; Gr 287-91.

¹⁸ Gr 289.

¹⁹ Adams, *Leibniz*, pp. 14-15.

²⁰ Adams argues for excluding information about God in his *Leibniz*, p. 15. Sam Newlands argues for an interpretation according to which information about other finite substances but not about God are excluded from the essences of finite substances in his paper "The Harmony of Spinoza and Leibniz," *Philosophy and Phenomenological Research*, forthcoming.

²¹ Gr 289.

²² Or more accurately, it is the comparison of possible worlds containing that substance to possible worlds that don't that inform God's creative decision.

²³ There are texts where Leibniz affirms the opposite, for example in a 1701 letter to De Volder. I am, however, in agreement with Adams (*Leibniz*, p. 19) that such texts do reflect Leibniz's considered view of *per se* modality.

²⁴ T 235.

²⁵ Gr 396

²⁶ L 485, G VII 302.

²⁷ A VI.iii:463.

²⁸ A IV, iii:127; Sleight (2005), p. 55

²⁹ A IV iii: 116, Sleigh (2006), p. 29. In the original, Leibniz presents this question and answer in dialogue form.

³⁰ See, for example, the Leibniz-Clarke Correspondence, L5.7.

³¹ 2p8.

³² 3p7.

³³ 2p8, 2p8c, 1p33s

³⁴ "Spinoza on the Eternity of the Mind," in the *Cambridge Companion to Spinoza's Ethics*, Olie Koistinen ed. (Cambridge University Press, *forthcoming*.)

³⁵ 1p15

³⁶ Ethics 4, preface.

³⁷ 4d1 and 4d2.

³⁸ 1d5.

³⁹ 1p15 and 2p8.

⁴⁰ Whether or not this infinite mode can be identified with the "face of the entire universe" mentioned in Letter 66 there must still be such an infinite mode. This is because there is a true proposition that reports the whole truth of the series of finite things. For every truth there is a mode of thought in the mind of God that represents that truth. For every mode of thought there is a mode of extension that is the object of that mode of thought.

⁴¹ 1p8s2.

⁴² Edwin Curley, *Spinoza's Metaphysics*, (Cambridge: Harvard University Press, 1969).

⁴³ Don Garrett, "Spinoza's Necessitarianism," *God and Nature in Spinoza's Metaphysics*, edited by Yirmiyahu Yovel, 191-218. Leiden: E.J. Brill, 1991.

⁴⁴ 2p15d

⁴⁵ 2p14d

⁴⁶ 2p16 2p16d, 2p16c1.

⁴⁷ Someone might object that cognitive states don't have any phenomenal feel and so can't be objects of introspective awareness. But it is not implausible to think that a subject can acquire information about its own cognitive states through some kind of internal monitoring. Such internal monitoring, whatever specific form it takes, is what I mean by 'introspection' in this context.

⁴⁸ Curely, *Metaphysics*, pp. 126-129, and Curely, *Behind the Geometrical Method*, (Princeton: Princeton University Press, 1988) pp. 71-3; Margaret Wilson, *Ideas and Mechanism*, (Princeton: Princeton University Press, 1999) pp. 124-5, Don Garrett, "Representation and Consciousness in Spinoza's Naturalistic Theory of the Mind and Imagination" in *Interpreting Spinoza: Critical Essays*, edited by Charles Huenemann (Cambridge: Cambridge University Press, 2008), and Steven Nadler, "Spinoza and Consciousness," *Mind* (117), July 2008, pp. 575-601.

⁴⁹ Garrett, "Representation" and Nadler, "Consciousness," p. 589.

⁵⁰ Sleigh, 2005, xxvi-xxvii; John Carriero, "Leibniz on Infinite Resolution and Intra-Mundane Contingency. Part One: Infinite Resolution," *Studia Leibnitiana*, Band XXV/i, 1993, p. 3. Even Adams, who is generally very sympathetic to Leibniz's account of *per se* possibility is prepared to concede that the account of contingency that emerges from it deviates from our ordinary understanding of contingency, "Response to Carriero, Mugnai, and Garber," *Leibniz Society Review*, 6 (1996): 107-25.

⁵¹ A VI.1:539; Sleigh (2005), p. 11. (translated from the German by Brandon Look)

⁵² A VI.iii:125; Sleigh (2005), p. 51.

⁵³ G I:149; L 204.

⁵⁴ This argument comes from "On the Omnipotence and Omniscience of God and the Freedom of Man," A VI.1:539-540, Sleigh (2005), pp. 11-12.

⁵⁵ "Essence and Modality," in *Philosophical Perspectives*8 (ed. J. Tomberlin) as the Nous Casteneda Memorial Lecture, pp. 1-16 (1994).

⁵⁶ It must be noted that Fine's example makes trouble for Leibniz's account of *per se* modality. If it is not the case that Socrates is essentially a member of singleton Socrates, then, on Leibniz's account, it is possible that Socrates is not a member of singleton Socrates. This is an unfortunate result. We could, however, amend Leibniz's account so that it handles Fine's case appropriately and still retains all the features that attracted Leibniz to it. The amended account of possibility would hold that if something is essentially *F* then it is necessarily *F* but not that if something is necessarily *F* then it is essentially *F*. If something is necessarily *F*, however, we could say that it is so in virtue of some essence or essences. Thus it true that Socrates is necessarily a member of singleton Socrates in virtue of some essence—perhaps the essence of God, which Leibniz believes is the basis for eternal truths like mathematical truths. This amendment would not have as a consequence that the actual world is necessarily actual because the essences of things alone don't make it the case that this world is the best possible world because among the goodmaking features of the actual world are contingent (i.e., nonessential) properties of the substances that constitute it.

⁵⁷ The closest possible world is the one which does not differ from the actual world in any respect other than with respect to the truth of the antecedent.

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