

Troubles with Hypothetical Impossibility¹

The preservation of divine choice is essential for any adequate interpretation of Leibniz's philosophy. Therefore, any adequate interpretation of Leibniz's texts ought to avoid conclusions that lead to the elimination of divine choice e.g., necessitarianism. Necessitarianism is a Spinozistic doctrine which has it that nothing is contingent and thus all things, including this world, exist necessarily. Key to Spinoza's argument for necessitarianism is the notion that all that possibly exists does exist: God's nature contains an infinite number of things in an infinite number of modes; and everything that *is* (this includes the possible), is in God (who is necessary), therefore nothing is contingent and everything is necessary (Spinoza IP 29). Tacit in Leibniz fundamental assumption: that God chose (to actualize) the best of all possible worlds, lies his belief that there are some possible (non-actual) worlds, and thus the actual is not co-extensive with the possible (the existence of an actual world prohibits the existence of other worlds). Leibniz held that if some possible X is compossible with some possible Y, then if Y exists, X exists; that is, that sets of compossibles comprise possible worlds (cf. PPL 169). Therefore, interpretations which entail that all possibles are compossible are in danger of implying necessitarianism. Not only did Leibniz explicitly deny this claim: "all possibles are not compossible" (PPL 662), but such interpretations are clearly damaging to Leibniz's apologetic concerns: "such a God as the pious hold to would not be possible if the opinion of those is true who believe that all possibles exist" (PPL 169).

In their book, Substance and Individuation in Leibniz, J.A Cover and John O'Leary-Hawthorne offer a complete and thorough interpretation of the relevant parts of

¹ I'd like to thank Donald Rutherford for his help and guidance with this paper.

Leibniz's metaphysics. However, Cover and O'Leary-Hawthorne's position, which they label "strong essentialism," is at odds with Leibniz's views on (in)compossibility and appears to lead to necessitarianism: "We have arrived at the view that all possibles are, considered in themselves, compatible with each other: all possible substances are *per se* compossible" (Cover, O'Leary-Hawthorne 137). This problem is not ignored by Cover and O'Leary-Hawthorne; they take notice of it and attempt to develop a theory of impossibility intended to disencumber strong essentialism of its un-Leibnizian consequences. I argue, however, that Cover and O'Leary-Hawthorne's attempt fails and therefore, their interpretation, as is, implies necessitarianism.

In §1 of this paper, I discuss the threat of necessitarianism in more detail, introduce a typical way of circumventing the problem, and describe how Cover and O'Leary-Hawthorne's strong essentialism, at least *prima facie*, permits necessitarianism; in §2 I discuss Bertrand Russell's position, how it fails, and Cover and O'Leary-Hawthorne's attempt at a theory of impossibility (hypothetical impossibility); and in §3 I discuss how Cover and O'Leary-Hawthorne's hypothetical impossibility fails, and therefore entails necessitarianism.

1. The Ins and Outs of Necessitarianism

Along with many apologists, Leibniz is concerned with the infamous problem of evil. Essential to Leibniz's solution of the problem of the evil is an account of possible worlds (each world enjoying varying degrees of goodness). Though other worlds are metaphysically possible, the best of all possible worlds is the only world a perfect and just God would create. The divine choice of the best rather than an inferior world is indispensable in Leibniz's defense against the problem of evil (cf. T §168). If God is a

just and perfect God, He must be understood as choosing the best possible world. For God to be able to do this entails that there is more than one world for Him to choose from. And for there to be more than one world, there must be multiple sets of compossible substances which are impossible with other substances. Leibniz assumed that sets of compossibles are worlds (cf. PPL 169). Therefore, if all possibles are compossible, there is only one world. If there is only one world, there is not a plurality of possible worlds of which God can choose the best; therefore, the divine choice is theoretically stolen from God. This undermines God's justice and Leibniz's Theodicy, which is clearly something Leibniz would not endorse.

The most common way of understanding Leibniz's doctrine of (in)compossibility is through a "superessentialist" interpretation of his metaphysics. Superessentialism enjoys a clear cut way of providing impossibility, and thus a clear cut way of dodging the threat of necessitarianism. Superessentialism has it that all the properties of an individual, including all relational properties, are essential to that individual. Relational properties are included in complete concepts² and are thus essential to individuals. There is some textual evidence for this position: Leibniz and Arnauld discuss Arnauld's marital status, namely if Arnauld had been married, then he would not be Arnauld (cf. Grua 358, quoted in Cover, Hawthorne 94). If Arnauld existed in a different world, then he would have different relational properties. The superessentialist account of impossibility is intimately tied to individuals' relational properties. For example, Bill is impossible with Ann because (1) Bill's complete concept contains the relational property of being

² A complete concept, debatably, is defined as God's concept of individual X. The complete concept contains all truths about X (cf. DM §8). However, it is not identical to a specific list of conjunctions about X. It is, rather, a richer notion of the individual than a list of predicates true of him or her. For a thorough treatment of "complete concept" see Cover and O'Leary-Hawthorne, pp. 214-52.

married to Ann at T1 and (2) Ann's complete concept includes the relational property of not being married to Bill at T1. If (1) and (2) are both true, Ann and Bill yield a contradiction in the world that contains them both. Therefore, there is not a world which contains both of them because Ann and Bill are impossible. If, like Ann and Bill, other individuals do not have agreeing relational properties, then those individuals are impossible. This is a fairly straightforward way of providing impossibility; however this is not an option for Cover and O'Leary-Hawthorne.

Cover and O'Leary-Hawthorne reject the superessentialist interpretation of Leibniz's metaphysics and argue instead for a position called "strong essentialism." The strong essentialist account has it that (1) the complete concept of an individual is essential to that individual and therefore, he or she *could not* have a different complete concept. Unlike the superessentialist, however, the strong essentialist denies (2) that all of an individual's properties are essential to that individual; and (3) that individuals are world-bound. Consequently, the strong essentialist ought to hold that transworld individuals are indeed possible. Further, yet perhaps unimportant to our conversation, it is a tenet of Cover and O'Leary-Hawthorne's strong essentialism that Leibniz "employs a counterpart-theoretic account of *de re* modal truths" (Cover, O'Leary-Hawthorne 104). One may have a counterpart if there is a world in which that individual does not exist, but a sufficiently similar individual (counterpart) exists. This counterpart-theoretic account of *de re* modality does not result in the denial of transworld individuals as do some contemporary accounts of modality (e.g. David Lewis's account).

Strong essentialism entails that the actualized or instantiated complete concept *is* a certain law-of-the-series³. This law-of-the-series (which is absolutely included in an individual's complete concept) is taken to be the individual *per se* (75n. 27). According to Cover and O'Leary-Hawthorne (cf. 133) a primitive law-of-the-series does not contain any of an individual's relational properties, and therefore no relational property is essential to an individual. Relational properties supervene on individuals' intrinsic properties. Different sets of individuals yield diverse relational properties. A relational property is a byproduct of certain intrinsic properties of an individual and God's seeing at least two individuals' properties connected at a world.

The tenets of strong essentialism result in all possibles being compossible. If this is legitimately derived, it is a significant problem for the strong essentialist interpretation. If there is nothing preventing all possibles from being a part of the same world (e.g. contrary relational properties), then all possibles are in the same world. Leibniz argues: "whatever can exist and is compatible [compossible] with other things does exist" (PPL 169). Accordingly, if all possibles are compossible, then the possible is coextensive with the actual and thus there is only one world (the world that contains all possibles). The world containing all possibles is a necessary world because all possibles are a part of that world. Therefore, if one thing is possible (say God), and the above is true, then all is actual. This looks a lot like Spinoza's necessitarianism, something, as I discussed above, Leibniz clearly rejected (PPL 662).

2. Strong Essentialism and Impossibility

³ The law-of-the-series is the lawful internal mechanism of change in each instantiated individual. Because each substance is windowless (has no interaction with anything external save God), all of its changes are brought about from its own internal operations. For an excellent treatment of the law-of-the-series see Cover and O'Leary-Hawthorne, pp. 214-52.

Bertrand Russell offered a model of (in)compossibility in which each possible world is characterized by a distinct principle of design or local (i.e. true at a particular world) general laws of order. Conformity to these general laws of order permits the compossibility of certain possibles. Further, possibles are impossible when “there is no general law whatever to which both conform” (Wilson 129). This “reign of law” (i.e. a law of order necessary for any world) is couched, by Russell, in terms of sufficient reason. Some sufficient reason is metaphysically necessary for any world to be a world, though each reason will be endemic to a particular world (cf. 129). This picture of compossibility does not require that there be a lack of contradiction between individuals *simpliciter*, but between individuals according to a certain sufficient reason or law of order.

Margaret Wilson, and Cover and O’Leary-Hawthorne both critique Russell’s account of impossibility. The consensus among them is that “the relevant facts about laws that generate impossibility results are much richer than the general requirements of lawfulness offered by Russell on behalf of Leibniz” (Cover, O’Leary-Hawthorne 133). Russell’s account appears to be consistent with the universal order described in *Discourse on Metaphysics* §6:

Everything is in conformity with respect to the universal order. . .let us assume that someone jots down a number of points at random on a piece of paper. . . I maintain that it is possible to find a geometric line whose notion is consistent and uniform, following a certain rule, such that this line passes though all the points in the same order in which the hand jotted them down. (DM §6)

If “*any* putative group of possibles must conform to some law” (Wilson 130), then Russell is in trouble. *Discourse on Metaphysics* §6 entails that all possibles can be connected by some general law; and if all possibles conform to a general law, according to Russell, all possibles are compossible. Russell’s account is hardly sufficient to provide impossibility; therefore, we need something more specific.

To get around the threat of Spinozistic necessitarianism, Cover and O’Leary-Hawthorne posit a strong essentialist account of compossibility. This model of compossibility has it that while it is true that all possibles are *per se* compossible, it is not true that all possibles are “hypothetically compossible.” If all possibles (possible substances) are identical to their instantiated primitive law-of-the-series, and their relational properties are ontologically distinct from the law-of-the-series, there is nothing constraining all possibles from being *per se* compossible; therefore, all possibles are *per se* compossible. According to Cover and O’Leary-Hawthorne, however, *per se* compossibility is not the sort of compossibility with which Leibniz was concerned. A set of possibles that are *per se* compossible may be impossible with respect to certain additional laws: “we propose . . . that impossibility claims are only ever true in relation to a certain set of presumed particular lawful decrees” (Cover, O’Leary-Hawthorne 137). This impossibility according to lawful decrees is what Cover and O’Leary-Hawthorne call “hypothetical impossibility.” These decrees are decrees of harmony which allow certain individuals to be compossible while causing others to be impossible. Further, those individuals which are compossible with respect to “God’s designs for the best . . . [enjoy] morally necessary decrees of harmony” (137). Merely possible (i.e. non-actual) worlds enjoy varying degrees of harmony and inferior

governing laws. God has different sets of decrees, each of which are compatible with sets of individuals that are compossible with each other and those laws, and not compossible with others excluded by those laws. Therefore, hypothetical impossibility is what, according to Cover and O’Leary-Hawthorne, keeps all possibles from being compossible. This hypothesis entertains *distinct* decrees of harmony which, one would imagine, enjoy varying degrees of goodness. Together the perfect decrees and the corresponding compossible individuals yield the best possible world. This best possible world is comprised of some, but not all, possibles. Less than perfect decrees and compatible individuals yield inferior worlds. Like the best possible world, these inferior worlds are comprised of some but not all possibles; therefore the problem of Spinozistic necessitarianism is circumvented.

3. Problems with Hypothetical Impossibility

In this section I argue that strong essentialism, as construed by Cover and O’Leary-Hawthorne, appears to be in the same boat as Russell’s account of impossibility. Their story differs from Russell’s in that Russell claims possibles along with general lawfulness determine impossibility, while Cover and O’Leary-Hawthorne argue “that impossibility claims are only ever true in relation to a certain set of presumed particular lawful decrees” (137). Cover and O’Leary-Hawthorne’s position is stronger than Russell’s in that they name the type of lawfulness that is required to generate impossibility. While Cover and O’Leary-Hawthorne insist that specific lawful decrees, namely decrees of harmony, determine impossibility, it is far from clear how any specific decrees of harmony will do this. Why can’t there be specific lawful decrees of harmony that allow all possibles to be compossible? Whatever God

does, he does it in an orderly manner even if the orderly manner does not render individuals impossible (DM §6). By “orderly manner” I mean that one is able to derive a law from the constituents in the process that was performed. If God can instantiate the set of all possibles, then he would do so in an orderly manner. Why doesn’t this orderly manner correspond to a law of harmony? If it is harmony, then Cover and O’Leary-Hawthorne’s hypothesis does not aid in generating impossibility. But this is clearly not what Cover and O’Leary-Hawthorne have in mind; indeed, they do not want to say that any lawfulness is understood as a law of harmony. But we are left in the dark about what is involved in harmony and the “fairly specific facts about which laws operate” (Cover, O’Leary-Hawthorne 137).

As it stands Cover and O’Leary-Hawthorne’s position looks quite similar to Russell’s account. They posit that laws of harmony are the devices which generate impossibility. Russell argued that the device is general lawfulness. What keeps Cover and O’Leary-Hawthorne in the same boat with Russell is that simply adding specific lawful decrees of harmony to compossibles does not seem to be enough to get impossibility, especially when those laws may function as the laws described in *Discourse on Metaphysics* §6 do. Cover and O’Leary-Hawthorne do not specify what they mean by laws of harmony, thus their position is open to Wilson’s (and their own) charge of generality. Answers to the following questions are of the utmost importance for Cover and O’Leary-Hawthorne if they wish to escape this problem of ambiguity and, ultimately, the trouble of necessitarianism: What is meant by specific laws of harmony? and What is the difference between harmony and expression?

Laws of expression are typically understood as being very general. Characterizing these laws Leibniz writes: “one thing expresses another (in my terminology) when there exists a constant and fixed relationship between what can be said of the one and of the other (October 19 1686: G II, 112, quoted in Cover, O’Leary-Hawthorne 98-9). It is commonly thought that the laws of expression are the laws depicted in *Discourse on Metaphysics* §6. And therefore all possibles are joined together by laws of expression. Harmony on the other hand is typically understood as a stricter relation than expression. Harmony has to do with phenomenal states of monads: if monadic phenomenal states agree, then they harmonize in some way. For example, if Bill sees his license plate as reading “LVMYFAM” and Danny also sees Bill’s license plate as reading “LVMYFAM,” then their perceptual states harmonize. Catherine Wilson (citing Donald Rutherford) describes harmony as ranging from the “simple and elegant laws of nature . . . to laws of the union of soul and body, and to the proportionality of ultimate rewards and punishments to deeds. . . . Further, *harmony* of substances is . . . an excellence-making feature of our world, and reflection on it is supposed to be ethically motivating” (Wilson 109). Expression is something that must be true of any group of possibles while harmony adds value and beauty to groups of compossibles. Thus Cover and O’Leary-Hawthorne may be read as claiming that if certain individuals’ perceptual states do not harmonize, then these individuals are not compossible.

Cover and O’Leary-Hawthorne take harmony to be essential for impossibility. However, while Cover and O’Leary-Hawthorne assert that “[they] should not be taken for claiming that . . . the doctrine of expression, as a claim about the existence of laws of order at a world, is equivalent to the doctrine of universal harmony” (Cover, O’Leary-

Hawthorne 99n. 16), this declaration of distinctness is hardly sufficient for determining a real difference between the two. Universal harmony is different from the doctrine of expression, but how and in what way? How similar is harmony to expression? If harmony is a lot like expression, then it appears that Cover and O’Leary-Hawthorne’s position falls prey to the threat of necessitarianism. If the laws of harmony are distinct from expression this is good, but does not, by itself, guarantee that harmony will provide what is necessary for impossibility. Maybe harmony is distinct from expression in a way that makes little difference with regard to impossibility. What Cover and O’Leary-Hawthorne need is the premise: not only is harmony distinct from expression, but it is in such a way that renders some possibles impossible and others compossible.

Cover and O’Leary-Hawthorne’s position on harmony is, in Ned Block’s words, either “chauvinistic” or “liberal” (Block 437). If chauvinistic, their criteria for harmony are too strict: they make the actual world the only possible world; in this sense their position is vulnerable to necessitarianism. If liberal, their position does not provide strong enough criteria to make *per se* compossibles hypothetically impossible; and thus harmony is too similar to expression to avert the problem of necessitarianism.

According to Cover and O’Leary-Hawthorne (cf. 99) universal harmony is a necessary and sufficient condition for compossibility. It seems to be a conceptual truth that if perceptual states of monads completely disagree, then they do not belong in the same world. We know the best possible world enjoys universal harmony, but is there universal harmony among substances in lesser worlds? If Cover and O’Leary-Hawthorne say “no,” then their account of harmony is chauvinistic for it denies that there are any merely possible (i.e. not actual) worlds. If universal harmony is a necessary and sufficient

condition for compossibility, and no non-actual possibles harmonize with each other, then there are no merely possible worlds. If the only harmonious world is the best possible (actual) world, then intuitively plausible worlds such as a set of possibles that have mostly corresponding perceptual states and represent a world with elegant (but different than the actual) laws of nature are impossible. All *prima facie* possible (non-actual) worlds are impossible. The actual is the only possible, therefore the possible is co-extensive with the actual; there being only a solitary possible world (the actual world), means that world is necessary. If Cover and O’Leary-Hawthorne hold that no other world besides the actual world enjoys harmony, their position falls under necessitarianism. But they, I think, will agree that other merely possible worlds do enjoy harmony (cf. Cover and O’Leary-Hawthorne 137) and therefore, harmony must be, by their position, enjoyed in degrees.

However, if Cover and O’Leary-Hawthorne accept that there are other worlds that enjoy laws of harmony, and thus harmony is had in a matter of degrees, then they need to distinguish harmony from expression. If they do not, their position falls into liberalism because it allows harmony (with respect to (in)compossibility) to be functionally identical to expression. By failing to provide a sharp distinction between harmony and expression, Cover and O’Leary-Hawthorne’s hypothetical impossibility allows for all possibles to be compossible, and thus results in necessitarianism.

Different groups of compossible possibles enjoy varying degrees of harmony. But to what extent is harmony like expression? Expression only requires some constant and fixed relationship (cf. Cover, O’Leary-Hawthorne 98-9). If there are sets of individuals that share so little harmony that their states only relate with respect to one property or

with regard to one fixed relationship, say: for Bill and Danny the color of the sky on Mondays, and for Ted and Mary the fact that whenever one wakes-up the other drives a car, then it would be tempting to say that these individuals are impossible because of their many other contradictory properties. Maybe it is also true of Bill's complete concept that he is the father of Danny and it is true of Danny's complete concept that Bill is not his father. According to superessentialism this is a clear cut case of impossibility. But strong essentialism has it that all possibles are *per se* compossible and further, the laws of harmony are not distinct enough to demonstrate their difference from the laws of expression. It is not clear how Cover and O'Leary-Hawthorne will rule that Bill and Danny are impossible. Furthermore, to assume that this degree of harmony, while admitting contradictions, is not enough to generate impossibility is to be overly liberal in one's criteria of impossibility.

What if numerous properties corresponded between groups of individuals? Numerous agreements (and fewer disagreements) are better than singular agreements, but it is not clear how many agreements we need to ensure the compossibility of some and the impossibility of others. Does there have to be a particular ratio such as 1,105 harmonious relations between individuals to every two disharmonious relations in order to make them compossible? And if two individuals have 1,105 harmonious relations to every three disharmonious relations, does this automatically render these individuals impossible? If so, then this is also too liberal. Leibniz states that "a compossible is that which with another does not imply a contradiction" (Grua 325, quoted in Cover, O'Leary-Hawthorne 132). It does not seem fair to Leibniz's view to permit two contradictions for every 1,105 harmonious relation. So, do *all* perceptual states have to

harmonize? If all perceptual states must harmonize, then we fall back into chauvinism (harmony is not enjoyed in a matter of degree, it is an all-or-nothing relation). On the other hand, if having a particular ratio of harmonious relations to disharmonious relations between individuals is the only constraint for (in)compossibility, then it appears that *expression* is capable of such a task. And, in that case, clearly harmony is in no position to render any possibles impossible. There will always be something true of one individual that is in a fixed and constant relationship with another. For example, every time I stub my toe, three seconds later Bill forms a desire to toast.

Without a proper and specific account of laws of harmony, which according to Cover and O’Leary-Hawthorne render possibles (in)compossible, the function of harmony, with regard to impossibility, is analogous to the function of the laws of expression: both allow all possibles to be compossible. Beyond avowing that they are not equivalent (cf. 99n. 16), Cover and O’Leary-Hawthorne neither provide a clear account of harmony nor of expression. By not providing a clear account or distinction between harmony and expression, Cover and O’Leary-Hawthorne’s position is left open to objections along the same lines as Wilson’s objection to Russell and Block’s objection against functionalism: if harmony is quite similar to expression, laws of harmony are too liberal; and thus any set of possibles are not only *per se* compossible but also hypothetical compossible. Therefore, the liberal position results in necessitarianism.

We know that Cover and O’Leary-Hawthorne hold that perceptual states of monads in merely possible worlds harmonize less well than monadic perceptual states do in the actual world. Cover and O’Leary-Hawthorne inform their readers that the best possible world enjoys “morally necessary decrees of harmony” (137) and the other

possible worlds have the disadvantage of inferior sets of *decrees* (cf. 137). Does this mean that other worlds do not enjoy harmony? Not necessarily, though if the above assessment of their position is legitimate, it means that the other worlds enjoy a liberal type of harmony, which results in necessitarianism. This is so because Cover and O’Leary-Hawthorne’s tool for impossibility, “harmony,” does no more work in generating impossibility than does expression. And if expression determines what possible are (in)compossible with each other, all possibles would be compossible (DM §6). Our world (the best of all possible worlds) surely enjoys optimal harmony. This optimal harmony occurs when all of the perceptual states of individuals correspond appropriately. And to expect this of all monadic perceptual states (of merely possible worlds) is chauvinistic because it takes away the title “world” from many collections of compossible possibles. If in order to have a world you need optimal harmony, then there will only be one possible world (i.e. the actual world). No world except the best possible world enjoys this optimal harmony

Cover and O’Leary-Hawthorne provide an initially plausible model of Leibniz’s metaphysics. However, the consequences of their construal of hypothetical impossibility shed serious doubt on the legitimacy of their account. Because Cover and O’Leary-Hawthorne failed to provide a specific account of harmony and expression, their position is vulnerable to Wilson’s (and their) argument against Russell. Furthermore, hypothetical impossibility, if either too liberal or chauvinistic is guilty of robbing God of his divine choice, something Leibniz would not endorse. It appears to me that Cover and O’Leary-Hawthorne’s account of impossibility is in serious need of renovation in order to be a viable interpretation of the relevant Leibnizian texts.

Work Cited

- Block, Ned. "Troubles with Functionalism." Mind and Cognition. Ed. William Lycan. Massachusetts: Blackwell Publishers, 2002. 435-440.
- Cover, J.A, and O'Leary-Hawthorne , John. Substance and Individuation in Leibniz. Cambridge University Press, 1999.
- Leibniz, G.W. "Discourse on Metaphysics." Philosophical Essays. Trans. Roger Ariew and Daniel Garber. Indianapolis: Hackett, 1989. 35-68.
- . Philosophical Papers and Letters Vol 2. Trans., L.E. Loemker Ed., L.E. Loemker. D. Reidel Publishing Company: Boston, 1956.
- . Theodicy. Trans. E.M. Huggard. Ed. Austin Farrer. London: Routledge, 1951.
- Spinoza, Benedict de. "The Ethics." A Spinoza Reader. Trans. Edwin Curley Ed., Edwin Curley. New Jersey: Princeton UP, 1994. 85-264.
- Wilson, Catherine. "Compossibility, Expression, Accommodation." Leibniz: Nature and Freedom. Ed., J.A. Cover, and Donald Rutherford. New York: Oxford UP, 2005. 106-120.
- Wilson, Margaret D. "Compossibility and Law." Causation in Early Modern Philosophy. Ed., Steven Nadler. Pennsylvania: Pennsylvania State UP, 1993. 119-133.