

Compossibility, Harmony, and God's Wisdom in Leibniz

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Abstract: *Compossibility is one of the most important concepts in the philosophy of Leibniz (1646–1716). It enabled him to avoid Spinoza's (1632–1677) necessitarianism: whatever exists necessarily exists and there are no alternatives to what actually happens. Briefly, compossibility refers to the possibility of objects existing together. This concept causes a plurality of worlds. Since all possibles are not compossible in one and the same world, there are many possible worlds.*

While the importance of compossibility is evident, it has not been clarified thus far as to whether this concept is really strong enough. Why can we assert that God never creates multiple worlds? This paper will answer this question by discussing Griffin's interpretation. Griffin doubted precisely whether God ever created multiple worlds and proposed a necessitarian reading of Leibniz. On the contrary, this paper will conclude that we can interpret Leibniz without implying necessitarianism. Joráti's response to Griffin is to be considered. Consulting Messina and Rutherford's "cosmological interpretation" will improve this paper's suggestion.

This paper comprises four sections. The first section shows present interpretations of compossibility, including the cosmological interpretation. The second section refers to Griffin's interpretation. He claimed that God created all possible worlds as the best creation because God desired to the maximum reality. We examine whether his textual evidence can be interpreted otherwise. The third section considers Joráti's response to Griffin. She designated an important role for God's wisdom: it rules out what is unharmonious. Since multiple worlds are unharmonious, God does not create them. The fourth section concludes that we should adopt Messina and Rutherford's cosmological interpretation in addition to Joráti's. The best creation in Leibniz has a facet that is difficult to be described as the maximum reality. The cosmological interpretation details this facet as united spatiotemporal system.

1. Introduction

1.1. Can Compossibility Repel Necessitarianism?

Compossibility is one of the most important concepts in the philosophy of Gottfried Wilhelm Leibniz (1646–1716). It enabled him to avoid Baruch de Spinoza's (1632–

1677) necessitarianism:¹ whatever exists necessarily exists² and there are no alternatives to what actually happened, happens, and will happen.³ Leibniz criticized Spinoza by name,⁴ and refuting Spinoza's necessitarianism was his task.

Briefly, compossibility refers to the possibility of objects existing together. It is a relationship among possible substances and not possible worlds. This description is significant because, as we see later, when we admit compossibility among possible worlds, necessitarianism would be the end result. The concept of compossibility causes a plurality of worlds.⁵ Since all possibles are not compossible in one and the same world, there are many possible worlds.⁶ To belong to the same world, possible things have to be compossible with one another. Being individually possible does not necessarily mean being compossible with any other individual. Leibniz criticizes the actualization of all possible worlds for the reason that it threatens God's free will.⁷ In the process of creation, God desires to maximize the existing substances insofar as they are compossible.

In *Theodicy* (1710), it is showed that the concept of compossibility excludes the creation of all possibles:

[A]s all the possibles are not compatible together in one and the same world-sequence, *for that very reason (c'est pour cela même)* all the possibles cannot be produced. . . .⁸

¹ This role of compossibility has already been pointed out. Fred D'Agostino. "Leibniz on Compossibility and Relational Predicates", in *Leibniz: Metaphysics and Philosophy of Science*, ed. R.S. Woolhouse (Oxford: Oxford University Press, 1981), 90. Margaret Wilson, "Compossibility and Law", in *Causation in Early Modern Philosophy*, ed. Steven Nadler (University Park, PA: Pennsylvania State University Press, 1993), 122. Renée Bouveresse, *Leibniz (Que sais-je?)*. (Paris: PUF, 1994), 64. James Messina, and Donald Rutherford, "Leibniz on Compossibility", *Philosophy Compass* 4, no. 6 (2009): 962.

² Proposition 16 in Part 1 of *Ethics*.

³ Proposition 33 in Part 1 of *Ethics*.

⁴ For example, in *Theodicy*, Sections 173, and 372–373.

⁵ James Messina, "The Fate of the World (and Compossibility) After Leibniz: The Development of Cosmology in German Philosophy from Leibniz to Kant", in *Leibniz on Compossibility and Possible Worlds*, ed. G. Brown and Y. Chiek (Switzerland: Springer, 2016), 230.

⁶ Gottfried Wilhelm Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, ed. C. I. Gerhardt (Hildesheim: Olms, 1965), VI, 236 (Leibniz uses the adjective "compatible" there, and not "compossible"). Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, II, 573.

⁷ Gottfried Wilhelm Leibniz, *Opuscules et fragments inédits*, ed. Louis Couturat (Hildesheim: Olms, 1966), 530.

⁸ *Theodicy*, section 201 (Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, VI, 236). Italics mine. Translation of *Theodicy* is from the following. Gottfried Wilhelm Leibniz, *Theodicy: Essays on the Goodness of God the Freedom of Man and the Origin of Evil*, trans. E.M. Huggard (Charleston: s. n., 2015).

In “A Résumé of Metaphysics” (1697), Leibniz asserted that “since some things are incompatible with others, it follows that *certain possibles do not arrive at existence. . .*”⁹

While the importance of compossibility is evident, it has not been clarified thus far as to whether this concept is really strong enough. Why can we assert that God never creates multiple worlds? This paper will answer this question by analyzing Griffin's interpretation and Joráti's response to it. By “strong enough”, I mean that compossibility can be interpreted not to allow necessitarianism. As we see later, many interpreters do not consider compossibility as so. *Leibniz, God and Necessity* by Griffin is a notable exception. Griffin claimed a kind of compossibility among worlds and his interpretation doubts precisely if God ever created multiple worlds. Multiple existent worlds are definitely different from plural possible worlds. While the latter are ideas in God's intellect,¹⁰ the former are actual existents. To interpret compossibility as a strong enough concept, Griffin's reading should be discussed. Joráti's “Divine Faculties and the Puzzle on Impossibility” is a strong response to Griffin. Consulting Messina and Rutherford's “cosmological interpretation” will improve this paper's suggestion.

Whether Leibniz's philosophy can exclude Spinoza's necessitarianism depends on whether compossibility can be interpreted as a strong concept. Therefore, discussing interpretations of compossibility would help to understand a part of the history of early-modern philosophy.¹¹

1.2. Interpretations of Compossibility¹²

Before embarking on a discussion, let us examine three interpretations of compossibility. Griffin's interpretation proceeds as a criticism of the third cosmological interpretation. In “Leibniz on Compossibility”, Messina and Rutherford divided the current interpretations into two groups—logical and lawful,¹³ and then proposed their cosmological interpretation.

According to logical interpretation, two substances are compossible if and only if the supposition of their joint existence does not include logical contradiction.

⁹ “A Résumé of Metaphysics”, Leibniz, *Opuscules et fragments inédits*, 535. Italics mine. Translation for “A Résumé of Metaphysics” is from the following source. Gottfried Wilhelm Leibniz, *Leibniz, Philosophical Writings*, trans. Mary Morris and G. H. R. Parkinson, (New York: Dutton, 1973), 145.

¹⁰ Section 53 of *Monadology* (1714). Section 7 and 42 of *Theodicy*.

¹¹ Yakira compared Spinoza and Leibniz, regarding necessitarianism and liberty. Elhanan Yakira, *Contrainte, nécessité, choix : la métaphysique de la liberté chez Spinoza et chez Leibniz* (Zurich: Éditions du Grand Midi, 1989).

¹² This subsection is entirely based on Messina and Rutherford, “Leibniz on Compossibility”, 962–977.

¹³ The terms “logical interpretation” and “lawful interpretation” were originally proposed by Wilson, “Compossibility and Law”, 120–121.

God does not create a world that contains all possible substances because they conclude logical impossibility. Logical relations among possible substances are represented by their complete concepts. While this interpretation provides a simple and cogent response to Spinoza's necessitarianism, it does not have textual evidence as much as necessary. Leibniz treats compossibility mostly not as relations among concepts but as expressions among substances.

According to lawful interpretation, two substances are compossible if and only if they are connected and expressed under certain general laws of nature. Possible substances are impossible when God does not organize them into a world because they do not instantiate the law that he would like. This interpretation does not present further explanation on why God does not create a world that contains all possible substances. In this interpretation, any substances can make a world because any substances instantiate a certain law and, therefore, are compossible. Hence we have to admit a possible world that contains all possible substances. To avoid this difficulty, one can say that God would not like a law that connects all possible substances. Yet, without further explanation on why he does not like such a law, lawful interpretation cannot be a strong response to necessitarianism.

Against these two interpretations, Messina and Rutherford proposed cosmological interpretation. According to this, two substances are compossible if and only if God conceives of them as belonging to the same world. "The same world" refers to the same relations of time and space. God does not create a world that contains all possible substances because they cannot be conceived in one and the same spatiotemporal sequence.

This interpretation is supported by the text as follows:

I call *a world* the entire series and entire collection of all existing things, lest it be said that several worlds could have existed at different times and different places. For they must be reckoned all together as one world or, if you will, as one *universe*. And even though one should fill all times and all places, it still remains true that one could have filled them in infinite ways, and that there is an infinity of possible worlds, from among which God must have chosen the best, since he does nothing without acting in accordance with supreme reason.¹⁴

Messina and Rutherford explained this text that Leibniz affirmed: "there is an infinity of possible worlds, which are distinguished (in part) by the ways in which things are spatially and temporally ordered within them".¹⁵ They inferred a plurality of worlds from the fact that time and space can be filled in plural ways. In other words, there is an infinity of combinations of possible things to make a spatiotemporal relation.

¹⁴ Section 8 of *Theodicy*. (Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, VI, 107. Leibniz, *Theodicy*, 128.)

¹⁵ Messina and Rutherford, "Leibniz on Compossibility", 970.

Belonging to the same time and space is a more detailed condition than general law under lawful interpretation.

2. Griffin's Interpretation: God Creates All Possible Worlds

2.1. Griffin's Argument

Griffin criticized the cosmological interpretation after criticizing the lawful one and the logical one.¹⁶ He claimed that it cannot explain why God does not create all possible worlds:

However, their view [Messina and Rutherford's view] does not seem to have the consequence they intend, that God cannot create all possible substances. The most that follows from the fact that God cannot conceive substances which are impossible *as a world*—in their understanding of “impossible” and “world”—is that God cannot create them as a world. It does not follow that God cannot create them.¹⁷

Griffin's claim is clear: the fact that all possibles are not compossible as *a world* does not necessarily deny that God may create them as different worlds. We can say that Griffin draws attention to an implicit hypothesis of the cosmological interpretation: God creates only one world.¹⁸ Without this hypothesis, the cosmological interpretation would lose some of its strength.

Of course, Griffin did not ignore Leibniz's “anti-necessitarianism” argument.¹⁹ His interpretation seems to show that there is a conceptual problem in Leibniz's philosophy that makes him committed to necessitarianism. By “necessitarianism” Griffin meant that whatever is metaphysically possible is actual.²⁰ There is no pure possibility that does not become an actual being.

Now, let us see how Griffin develops a necessitarian reading. It can be reconstructed as follows. Leibniz's God desires to produce the greatest quantity of reality or essence²¹ as the best creation.²² The maximization of reality requires that

¹⁶ Michael Griffin, *Leibniz, God and Necessity* (Cambridge: Cambridge University Press, 2013), 95–99.

¹⁷ Griffin, *Leibniz, God and Necessity*, 103.

¹⁸ In the conclusion of their paper, Messina and Rutherford stated “Thus, on the assumption that God aims to create a unique world, he is limited to create some but not all possible substances”. For them, this assumption is not to be formally demonstrated. (Messina and Rutherford, “Leibniz on Compossibility,” 974.)

¹⁹ Griffin, *Leibniz, God and Necessity*, 83.

²⁰ Griffin, *Leibniz, God and Necessity*, 83.

²¹ For Leibniz, reality and essence are not what only an existent thing has. A possible substance has some reality, even if it will not be created forever. (Section 44 of *Monadology*.)

²² Griffin, *Leibniz, God and Necessity*, 106–107.

all possibles exist if such a creation is possible.²³ The more possible substances are created, the more reality is actualized. Most interpreters would agree that God desires to create substances as much as possible. But they would conclude that, while God's antecedent will desires to create all the possibles, his consequent will desires only the best collection of substances.²⁴ On the contrary, Griffin argued that God actually created all the possibles as he desired firstly.²⁵

According to Griffin, the existence of a world does not disturb the existence of another world because they are disconnected.²⁶ For Leibniz, a world has "universal harmony" by which a substance expresses all other substances in that world.²⁷ Griffin does not deny this. What he claims is that, because the substances of different worlds do not communicate, the existence of a world does not detract from other existent worlds' harmony. It should be noted that Griffin did not state that all possible worlds are harmonious. Although what he thought about it is not clear, he did not demonstrate it at least. The focus of his argument seems to be on showing that all possible worlds can be compossible, even if it is not shown that there is harmony among them.

Griffin's main claim can be condensed into the following two points: (1) All possible worlds are compossible; there is no intrinsic impossibility among them, and (2) God has a decisive reason to create all possible worlds: the maximization of reality as the best creation. As we will see later, we can interpret Leibniz without allowing (2) even if we admit (1).

Let us pay attention to the fact that Griffin considered the best creation as the maximization of reality. It is indispensable to his interpretation. As Griffin claimed, the set of all possible worlds would be the creation with the greatest reality because it contains all possible substances. Would it also be the most harmonious creation, then? If not, there is the possibility that God does not choose to create all possible worlds, preferring harmony to the greatest reality. Thus, Griffin's objection would be not as strong as it seems.

2. 2. Griffin's Textual Evidence and Reading It Otherwise

²³ Griffin, *Leibniz, God and Necessity*, 107.

²⁴ The difference between God's antecedent will and consequent will is stated in *Theodicy*, Sections 22–23.

²⁵ Griffin, *Leibniz, God and Necessity*, 108.

²⁶ Griffin, *Leibniz, God and Necessity*, 108. See also Rescher, who is considered as a proponent of logical interpretation. Rescher pointed out a similar conceptual difficulty in Leibniz: If impossible substances are unrelated to one another, why do they hold impossibility, which is a kind of relationship? Nicholas Rescher, "Logical difficulties in Leibniz's Metaphysics", in *Gottfried Wilhelm Leibniz: Critical Assessments II*, ed. R.S. Woolhouse (London: Routledge, 1994), 176–178.

²⁷ Section 59 of *Monadology*.

In developing his interpretation, Griffin presented textual evidence that God can create multiple worlds. Citing it here, we can see how he read it and then determine whether it can be interpreted otherwise.

The following extract is sourced from the text in 1676 that Griffin mainly depended on:

[I]t follows that infinitely many other spaces and other worlds can exist, in such a way that between these and ours there will be no distance, if there exist certain minds to which other things appear which are in no respect consistent with ours.²⁸

[I]t does not follow that there is not another world, or other minds which cohere among themselves in a way which is different from that which holds in our case.²⁹

Here, Leibniz seemed to admit that there can be multiple worlds. Minds that are separated into different worlds do not communicate with each other. Griffin inferred from this that God's power can admit to the existence of multiple worlds.³⁰

However, we do not have to interpret the above texts as strongly as Griffin did when we consider their contexts. Around the citation, Leibniz discussed God in relation to the human mind and argued for a relationship between space and our sensations. He claimed that we separate dreams from our own actual place by space as a criterion.³¹ As far as we have consistent sensations, there should be corresponding space that is not just a dream. The texts below also show that the context does not concern the best creation:

Further, just as the world and space of dreams differ from ours, so there could be different laws of motion in that other world. From this it is evident that so far is it from being the case that material things are more real than others, . . .³²

²⁸ Gottfried Wilhelm Leibniz, *Sämtliche Schriften und Briefe*, ed. Deutche Akademie Wissenschaften (Berlin: Akademie Verlag, 1923–), VI, iii, 511. Translation for this “De Summa Rerum” is from the following source. Gottfried Wilhelm Leibniz, *De Summa Rerum: Metaphysical Papers, 1675–1676*, trans. G. H. R. Parkinson. (New Haven: Yale University Press, 1992), 65.

²⁹ Leibniz, *Sämtliche Schriften und Briefe*, VI, iii, 512. (Leibniz, *De Summa Rerum*, 67.)

³⁰ Griffin, *Leibniz, God and Necessity*, 104. One can respond to this saying that the referenced text is sourced from the Paris period (1672–1676) and does not represent Leibniz's mature philosophy. However, Griffin also cited a similar text from the later years. A comment on Bayle's article “Rorarius” in the *Historical and Critical Dictionary* (1702). Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, IV, 519.

³¹ Leibniz, *Sämtliche Schriften und Briefe*, VI, iii, 511.

³² Leibniz, *Sämtliche Schriften und Briefe*, VI, iii, 511. (Leibniz, *De Summa Rerum*, 65.)

However, it is clear enough from this [there could be another world which is disconnected from ours] that space differs from God, since there could be several spaces, but there is one God, and the immeasurability of God in all things is the same.³³

These indicate that Leibniz described what another world would be like if it were to exist, rather than claiming that it should exist. I suppose that Griffin's textual evidence is not entirely a positive claim that God creates multiple worlds.

One may argue that Griffin's reading is excessive. Even granted, his interpretation is still notable because it revealed a critical but implicit hypothesis in Leibniz: Compossibility does not occur among possible worlds. Of course, Leibniz would not admit compossibility among worlds because it concludes necessitarianism. Yet it is not obvious what the conceptual basis for justifying such an attitude would be.

3. Joráti's Interpretation: God's Wisdom Excludes What is Unharmonious

Next let us consult Joráti's response to Griffin's interpretation. The distinction between God's wisdom and his intellect, which is a key of her interpretation, is precedingly acknowledged by Griffin.³⁴ Joráti also agreed with Griffin in that the cosmological interpretation cannot explain why God does not create all possible worlds.³⁵ Still, her interpretation is contrary to Griffin's necessitarianism reading.

3. 1. Joráti's Response to Griffin

Firstly, while recognizing that there are many texts where Leibniz uses "intellect" and "wisdom" interchangeably, Joráti claimed that they nonetheless contain different types of knowledge. For example, Leibniz states, "Ideas or essences are all founded on a necessity independent of wisdom [sagesse], fittingness and choice; but existences are dependent on them".³⁶ As this citation indicates, wisdom's function is not to hold all kinds of knowledge. Whereas God's intellect concerns all knowledge that is logically possible, his wisdom concerns knowledge of the good or of happiness.³⁷

³³ Leibniz, *Sämtliche Schriften und Briefe*, VI, iii, 512. (Leibniz, *De Summa Rerum*, 67.)

³⁴ Julia Joráti, "Divine Faculties and the Puzzle of Impossibility", in *Leibniz on Compossibility and Possible Worlds*, ed. G. Brown and Y. Chiek (Switzerland: Springer, 2016), 185.

³⁵ Joráti, "Divine Faculties and the Puzzle of Impossibility", 182.

³⁶ A letter to Bourget in 1716. Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, III, 592. Translation is from the following source. Gottfried Wilhelm, *The Shorter Leibniz Texts: A Collection of New Translations*, trans. Lloyd Strickland (New York: Continuum, 2006), 199.

³⁷ Joráti, "Divine Faculties and the Puzzle of Impossibility", 188.

Secondly, Joráti qualified God's wisdom as knowledge of harmony. As textual evidence, she refers to the following:

[W]e must resort. . . to the treasures of supreme wisdom [Summae Sapientiae divitias], which absolutely has not allowed God to do violence to the order and nature of the universe, disregarding law and measure, nor to disturb the universal harmony, nor to select another but the best series of events.³⁸

This citation shows that the function of wisdom is to constrain God to worlds with harmony or order.³⁹ Joráti concluded that God does not create all the possible worlds because his wisdom prevents him from making any unharmonious creation.

Let us assume a case in which multiple possible worlds are compossible despite being unharmonious, as Griffin did. According to Joráti, even if such a case is possible, God does not actualize them because his wisdom prevents him from making any unharmonious creation. Here is the advantage of Joráti's interpretation. It can deal with a situation that logical, lawful, and cosmological interpretations do not suppose: compossibility among possible worlds.

In sum, Joráti's interpretation consists in two specific claims: (1) God's wisdom is a different faculty from his intellect, and (2) God's wisdom is knowledge of harmony. The process of creation can be reconstructed as follows. God's intellect rules out logically and metaphysically impossible worlds. God's wisdom rules out a world that does not have harmony and constrains him from creating multiple worlds that do not share harmony.⁴⁰ Finally, God's will, with the principle of the best, chooses the best among the possible worlds.⁴¹

3. 2. More Requirements

Joráti's interpretation seems to contain potential weak points. To respond to Griffin sufficiently, we need to deal with two problems mentioned below.

The first is Section 6 of *Discourse on Metaphysics* (1686). Sometimes, it is referred to as a potential threat to lawful interpretation.⁴² As we saw already, this interpretation claimed that two things are compossible if and only if they are related

³⁸ *Causa Dei* (1710), Section 126 (Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, VI, 457). Translation is from the following source. Gottfried Wilhelm Leibniz. *Monadology and other Philosophical Essays*, trans. Paul and Ann Martin Schrecker (New York: Bobbs-Merrill, 1965), 141.

³⁹ Joráti, "Divine Faculties and the Puzzle of Impossibility", 189.

⁴⁰ Joráti did not explicitly say that a set of all possible worlds does not have harmony, but she seemed to assume it (Joráti, "Divine Faculties and the Puzzle of Impossibility", 185).

⁴¹ Joráti, "Divine Faculties and the Puzzle of Impossibility", 185.

⁴² Wilson, "Compossibility and Law", 129–130. Messina and Rutherford, "Leibniz on Compossibility", 966. Jeffrey K McDonough, "Leibniz and the Puzzle of Impossibility: The Packing Strategy", *The Philosophical Review* 119, no. 2 (2010):141, footnote 11.

under certain law. According to Section 6, however, it seems that law can be found for any set of substances:

God does nothing which is not orderly and it is not even possible to imagine events that are not regular.

Thus let us assume, for example, that someone jots down a number of points at random on a piece of paper, as do those who practice the ridiculous art of geomancy. I maintain that it is possible to find a geometric line whose notion is constant and uniform, following a certain rule, such that this line passes through all the points in the same order in which the hand jotted them down.⁴³

There is no interpretative problem with the claim that God always acts with order. What matters is that order or law seems to be everywhere.

Joráti is not a proponent of lawful interpretation, but the problem concerns her interpretation, too. In her interpretation, God's wisdom rules out any creation which lacks harmony, order, or lawfulness. Thus, if any set of substances can have order and harmony, God's wisdom would accept a set of possible worlds because it has certain order and harmony. Joráti paid attention to this problem while referring to the very text.⁴⁴ In another part of her paper, she claimed that only substances with a spatiotemporal system comprise a possible world if we take into consideration God's wisdom.⁴⁵ With this condition, creation of multiple worlds will not be an option for God. Even if they share a certain law, they do not share a spatiotemporal system and, therefore, do not make creation with harmony.

This solution makes Joráti's interpretation similar to the cosmological one. She admitted the possibility that the cosmological interpretation would overcome its weak point by considering God's wisdom, although this route was not taken.⁴⁶ According to her, while "God chooses to constrain himself to spatiotemporally connected worlds" in the cosmological interpretation, "his wisdom constrains him thus" in her interpretation.⁴⁷ While the cosmological interpretation has the merit that it details "order" and "law" as spatiotemporal systems, Joráti's interpretation has the merit that it indicates the role of God's wisdom to constrain himself.

⁴³ Leibniz, *Die Philosophischen Schriften von G. W. Leibniz*, IV, 431 (Leibniz, *Leibniz: Philosophical Essays*, 39). In section 7, Leibniz admits a miracle which seems to be inconsistent with order. However, he explains that a miracle follows the most general laws that God settled, even when it contradicts lower laws. Hence, a miracle does not deny that God always acts with order.

⁴⁴ Joráti, "Divine Faculties and the Puzzle of Impossibility", 183, footnote 18.

⁴⁵ Joráti, "Divine Faculties and the Puzzle of Impossibility", 185. It was based on Griffin, *Leibniz, God and Necessity*, 106.

⁴⁶ Joráti, "Divine Faculties and the Puzzle of Impossibility", 181, footnote 16.

⁴⁷ Joráti, "Divine Faculties and the Puzzle of Impossibility", 181, footnote 16.

The second problem concerns God's reason for creation. According to Griffin, God has a decisive reason to create all possible worlds: the maximization of reality. Of course, God's wisdom would not admit such an option. Still creation of all possible worlds would attain the maximum reality. Hence, to respond to Griffin effectively, we have to show that the best creation in Leibniz is not determined solely by the quantity of reality. Otherwise we cannot deny a case that God's other faculty than his wisdom may decide to create a set of all possible worlds despite their being unharmonious because trying to maximize the reality is one of God's principles for creation.⁴⁸

4. Which is the Best Creation, the Maximum Reality or the Most Harmonious? 4. 1. Difference between the Maximum Reality and Harmony

Griffin provisionally considered harmony of a world as a possible "limiting condition on the quantity of essence God realizes in creation".⁴⁹ But, in conclusion, he argued that the degree of reality equals harmony and offered a citation from a letter to Wolff in 1715:

Perfection is the harmony of things, or the state where everything is worthy of being observed, that is, the state of agreement [*consensus*] of identity in variety; you can even say that it is the degree of contemplability [*considerabilitas*]. Indeed, order, regularity, and harmony come to the same thing. You can even say that it is degree of essence, if essence is calculated from harmonizing properties, which give weight and momentum to essence, so to speak.⁵⁰

In this citation, "degree of essence" is not a simple sum of essences or reality but one of "harmonizing properties". "Perfection" seems to refer to both the quantity and variety of reality. "Elementa Verae Pietatis" (1677–1678) also offers the following: "**Perfection** is degree or quantity of reality" and "**Harmony** is unity in variety",⁵¹ and as its corollary "Harmony is perfection of cogitable things as far as they are cogitable".⁵² It is seemingly evident that harmony equals the quantity of reality.

⁴⁸ In order to avoid necessitarianism, Harmer qualified harmony as a higher level of determinateness (Adam Harmer, "Leibniz on Determinateness and Possible Worlds," *Philosophy Compass* 13, no. 1 (2018): 6–8). Yet his interpretation would have the same problem if harmony is not the first priority for creation.

⁴⁹ Griffin, *Leibniz, God and Necessity*, 107.

⁵⁰ Gottfried Wilhelm Leibniz and Christian Wolff. *Briefwechsel zwischen Leibniz und Christian Wolff*, ed. C. I. Gerhardt (Hildesheim: Olms, 1963), 172 (Leibniz, *Leibniz: Philosophical Essays*, 233–234).

⁵¹ Leibniz, *Sämtliche Schriften und Briefe*, VI, iv, 1358. My translation.

⁵² Leibniz, *Sämtliche Schriften und Briefe*, VI, iv, 1359. My translation.

However, Leibniz's attitude toward harmony can be interpreted otherwise. In the beginning of *Philosopher's Confession* (1672–1673?), harmony is defined as “[s]imilarity in variety, that is, diversity compensated by identity”.⁵³ It indicates that harmony is a relationship among things that are identical. Of course, Leibniz denied a doctrine that only a single substance exists and other beings are modifications of it, like Spinozism. Therefore, we should interpret “identity” here to mean unity. Substances in a world have to make a unity, while their expressions are various and diverse. This definition of harmony seems to already be a counterexample of the necessitarianism reading because different worlds cannot be considered as one. Harmony is expressed within *a* world.⁵⁴ This definition does not directly contradict citations from a letter to Wolff and “Elementa Verae Pietatis” because they state that harmony is accompanied by “identity” or “unity”. The latter text also says “the more variety and variety in unity, the greater harmony”.⁵⁵

“Unity” in Leibniz does not always indicate unity of a world. It frequently indicates unity of a corporal substance or a constituent of a corporal substance.⁵⁶ Unity of a world must not be treated the same as unity of a substance; otherwise we would treat a world as if it is one substance. Feeney pays attention to unity of a world to discuss impossibility in Leibniz.⁵⁷ According to him, unity of a world means the mutual expression of substances in that world.⁵⁸ This paper follows this interpretation. Since substances in different worlds do not express one another, multiple worlds do not have a common unity. They do not share what is needed to represent them together.

As a result, although Leibniz holds that harmony is the greatest reality in some texts, it is not clear that they are rigorously the same. Harmony in Leibniz has a facet that is difficult to be described as the maximum reality: unity of mutual expressions of substances. Certainly Leibniz's God chooses the best creation by calculation. In “On the Radical Origination of Things” (1697), Leibniz argued that there is a possible

⁵³ Leibniz, *Sämtliche Schriften und Briefe*, VI, iii, 116.

⁵⁴ A letter to Arnauld in 1687 (Leibniz, *Sämtliche Schriften und Briefe* II, ii, 245).

⁵⁵ Leibniz, *Sämtliche Schriften und Briefe*, VI, iv, 1359. My translation.

⁵⁶ According to Levey, a corporal substance in 1679–1690 has unity *per se* (Levey, “On Unity and Simple Substance in Leibniz”, *The Leibniz Review* 17 (2007): 72–74). On the other hand, Arthur argues that an organic body does not have real unity although it contains unities (Arthur, “Presupposition, Aggregation, and Leibniz's Argument for a Plurality of Substances”, *The Leibniz Review* 21 (2011): 101–103).

⁵⁷ Thomas Feeney, “Leibniz, Acosmism, and Impossibility”, in *Leibniz on Compossibility and Possible Worlds*, ed. G. Brown and Y. Chiek (Switzerland: Springer, 2016) 163–166.

⁵⁸ Feeney, “Leibniz, Acosmism, and Impossibility”, 163. He mentioned Section 9 of *Discourse on Metaphysic*, a letter to De Volder (Gottfried Wilhelm Leibniz, *The Leibniz- De Volder Correspondence: With Selections from the Correspondence between Leibniz and Johann Bernoulli*, trans. Paul Lodge (New Haven: Yale University Press, 2013), 266–267), and Sections 56–8 of *Monadology*.

series by which the maximum reality is provided with the minimum cost.⁵⁹ But, at the same time, the calculation is not strictly the same as the degree of reality. "On the Radical Origination of Things" continues that minimum cost means "time, place, or so to say receptivity or capacity of a world".⁶⁰ God desires to maximize the reality as far as it is expressed in *a* world.

4. 2. Conclusion: the Cosmological Interpretation with God's Wisdom

We can conclude that it is a sufficient response to Griffin's necessitarianism reading to adopt the cosmological interpretation by Messina and Rutherford in addition to Joráti's interpretation. Such an interpretation would be as follows. A set of all possible worlds has the maximum reality but is not the most harmonious because multiple worlds are disconnected and there is no united spatiotemporal system. According to Joráti, God's wisdom, that is knowledge of harmony, rules out what is unharmonious. Thus it rules out a set of all possible worlds and God would look for the most harmonious creation within a single world. Even if there is no function in Leibniz's philosophy to prevent all possible worlds from just being logically compossible, God does not have a decisive reason to realize all of them.⁶¹

In the process of creation, harmony is considered twice by different implications.⁶² Firstly, as Joráti pointed out, absence of harmony is the reason why God did not create multiple worlds. In this meaning, harmony is "all-or-nothing" property⁶³ and every possible world has its own harmony, that is, a unified spatiotemporal system. Secondly, after ruling out multiple worlds as an option for creation, God chooses the most harmonious possible world as the best creation. In this meaning, harmony allows difference in degree. The best possible world should have the most beauty and the most goodness, when compared with other possible worlds.

The beginning of this paper proposed the question as to whether compossibility is strong enough as a concept, and why we can assert that God never creates multiple worlds. This paper responds to that question by saying that compossibility is strong enough when we interpret it as belonging to the same spatiotemporal system and take account of God's wisdom.

I would like to thank Editage (www.editage.com) for English language editing.

⁵⁹ Leibniz, *Die Philosophischen Schriften von G.W. Leibniz*, VII, 303.

⁶⁰ Leibniz, *Die Philosophischen Schriften von G.W. Leibniz*, VII, 303. My translation.

⁶¹ Deleuze simulated a case in which different possible worlds were impossible but God created all of them, nevertheless. Gilles Deleuze, *Le pli : Leibniz et le baroque* (Paris: Éditions de Minuit, 1988), 84. Of course, such a God lacks wisdom and is not Leibniz's God anymore. This is where Deleuze left Leibniz and went to his own philosophy in *Le pli*.

⁶² This distinction is based on Donald Rutherford, *Leibniz and the Rational Order of Nature* (Cambridge: Cambridge University Press, 1995), 197–199.

⁶³ This expression is used in Joráti, "Divine Faculties and the Puzzle of Impossibility", 193.

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