

Counterfactuals of Creaturely Freedom (hereafter, CCFs) are usually conceived of as subjunctive conditional statements of the form: ‘If x were in C , then x would freely do A ’. These statements thus represent what an individual would freely do if they were placed in particular circumstances — without these circumstances causally determining their actions. Knowledge concerning the truth of these statements thus allows God to order the world in the manner that he desires in a way that does not transgress the freedom of the individuals that inhabit the world. How this can be further grasped is through understanding that the doctrine of middle knowledge finds its place within a certain conception concerning the logical structure of God’s knowledge. That is, there is a series of three logical moments in the knowledge of God, which each play a role in providing a basis for his providential control over all of reality. At a general level, the knowledge that God possesses is something that he possesses throughout eternity — which means that there is no temporal succession in his knowledge — however, there is a logical structure to God’s knowledge such that his knowledge of the truth value of a certain proposition is explanatorily prior to his knowledge of the truth value of another proposition. Thus, there is a structure of logical priority in God’s knowledge where certain propositions serve to explain other certain propositions. Following Thomas Flint and William Lane Craig,² we can detail the nature of this logical structure as follows:

2 Thomas Flint, *Divine Providence: The Molinist Account* (Cornell Univ. Press, 1998), 42; William Lane Craig, *The Only Wise God* (Baker Book House, 1987), 131; *Divine Foreknowledge and Human Freedom* (Brill, 1990), 237–239.

Logical Structure	1. Natural Knowledge	2. Middle Knowledge	Creative Activity (Decision)	3. Free Knowledge
Truths	Necessary and Independent of God's free will Everything that 'could' happen.	Contingent and Independent of God's free will Everything that 'would' happen.	/	Contingent and Dependent on God's free will Everything that 'will' happen.
Knowledge	God's essential knowledge of all possibilities. The content of which includes all logical necessities and an infinite range of possible combinations of entities.	God's essential knowledge of all feasibilities. The content of which includes knowledge concerning what any free individual would do under any possible set of circumstances.	/	God's knowledge of what is actual. The content of this knowledge is not essential to God.

Table 1.1 Logical Structure of God's Knowledge (i)

For logical moment 1: 'Natural Knowledge', we have the first logical moment in which God possesses a form of knowledge termed 'natural knowledge', which is knowledge of all possibilities. The specific content of this knowledge — which includes necessary truths, all the possible individuals that God could actualise and all of the possible circumstances that he could place them in — is true in virtue of the nature of God and not on the basis of his will. In his natural knowledge, God thus knows everything that *could* happen — with this knowledge and its content being essential to God.

For logical moment 2: 'Middle Knowledge', we have the second logical moment in which God possesses a form of knowledge termed 'middle knowledge', which is knowledge of all true counterfactual propositions — that is, God possesses knowledge concerning what specific contingent possibility

would obtain, if certain antecedent states of affairs were to obtain as well. As noted previously, in God's natural knowledge, he knows what any free creature *could* do in any of the circumstances that they are situated within. However, in this specific second moment, God knows truths concerning CCFs and thus what any free creature *would* do in any of the circumstances that they are situated within. Yet, as also previously mentioned, this is not due to the fact of these circumstances somehow causally determining the individual's choice; rather, it is just the case that this is the way that the individual would freely choose in that circumstance. Hence, God simply knows that if he were to actualise a specific possibility that includes these circumstances, then certain other contingent states of affairs would obtain that includes the individual freely choosing in a certain way. More specifically, however, as the CCFs that are part of God's middle knowledge are true logically prior to God's actualisation of a specific feasibility, they are traditionally taken to be entities that obtain their truth value prior to the existence of any actual individuals. Thus, given the content of this form of knowledge, middle knowledge is similar to natural knowledge in being *pre-volitional*, and thus the content of this knowledge does not depend upon any decision of God — that is, God does not determine the truth value of any specific counterfactual of creaturely freedom. Nonetheless, middle knowledge is also dissimilar to natural knowledge in that the *content* of this knowledge is not essential to God — in short, CCFs, if true, are contingently so. Thus, the *content* of middle knowledge is not essential to God, even though the possession of this knowledge is essential to God.

Intervening before logical moment 3: 'Free Knowledge', we have God's freely willed decision to actualise a certain feasibility, which (non-temporally) leads to him having another form of knowledge termed 'free knowledge'. Through the possession of natural knowledge, God knows the (virtually) infinite range of possibilities. And by his middle knowledge, God knows the specific number of possibilities that are, in fact, feasible for him to actualise. On the basis of his natural and middle knowledge, God then — through a complete and unlimited deliberation of the options on the table — freely decrees to actualise one of these feasibilities. And, given this free decision, we thus have God possessing *post-volitional* knowledge of all true future contingent propositions within his free knowledge — that is, God's knows what an individual *will* do in any of the circumstances that they are situated within. This specific form of knowledge is *free* as it is explanatorily posterior to the

free divine decision to actualise a certain feasible possibility. Hence, as this knowledge is the result of God's free will decision to actualise a specific feasibility — where he could have freely chosen to actualise a different one — this form of knowledge is not essential to God — in short, the content of God's free knowledge could have been different.

Thus, in summary, within God's natural knowledge, God possesses knowledge of the infinite set of possibilities, which include what free individuals could do within the circumstances in which they find themselves. Within God's middle knowledge, there is an infinite subset of feasibilities, which include what free individuals would do in the circumstances in which they find themselves. God then freely chooses to actualise one of the feasibilities within this subset, and thus he possesses free knowledge, which is knowledge concerning what will be the case in the possibilities that God chooses to actualise. This logical structure in God's knowledge allows him to providentially control all of reality, yet individuals can still possess freedom in the choices that they make. There is thus great payoff for someone subscribing to the doctrine of middle knowledge; however, there is a central objection that has been raised against this doctrine, which has been termed the *Grounding Objection*. The Grounding Objection (hereafter, GO) focuses on raising a question concerning what grounds there are for the truth of the CCFs that are part of God's middle knowledge. As Robert Adams has importantly stated:

It has been doubted whether counterfactuals of freedom can be true, and hence whether middle knowledge is possible. Counterfactuals of freedom, as I have pointed out, are supposed to be contingent truths that are not caused to be true by God. Who or what does cause them to be true?³

In a related context, William Hasker has also raised a similar issue:

In order for a (contingent) conditional state of affairs to obtain, its obtaining must be grounded in some categorical state of affairs. More colloquially, truths about 'what would be the case'...must be grounded in truths about what is, in fact, the case.⁴

For grounding objectors like Adams and Hasker, there is a requirement for the truth of CCFs to be grounded by some entity, that is, that there needs

3 Robert Adams, "Plantinga on the Problem of Evil," in *Alvin Plantinga: A Profile* (D. Reidel Publishing Company, 1985), 232.

4 William Hasker, *God, Time, and Knowledge* (Cornell Univ. Press, 1989), 30.

to be something or some entity that is sufficient for their truth. However, it seems as if this entity (or entities) are not forthcoming, as the truth of the CCFs cannot be grounded in God — as knowledge of these truths are pre-volitional — and thus, these propositions are true independent of God’s will. Secondly, the truth of the CCFs cannot also be grounded in the individuals and circumstances that they refer to, as these individuals and circumstances are conceived of as being *non-actual* individual essences and states of affairs, and thus these propositions are true prior to the existence of these entities. Thus, these CCFs appear to lack grounds for their truth, as there is nothing that *exists* that grounds their truth. Following Alexander Zambrano,⁵ we can construe this within a truthmaking context and state the GO succinctly informally and formally as follows (where, again, ‘ $c \rightarrow z$ ’ represents a ‘Counterfactual of Creaturely Freedom’ and x stands for ‘truthmakers of CCFs’):

- (2) (Grounding Objection) There are not any truthmakers that cause (or are sufficient) for the truth of Counterfactuals of Creaturely Freedom.

$$[\sim \exists x [x \rightarrow (c \rightarrow z)].$$

Hence, if there are no true CCFs, then God cannot know them and thus possess middle knowledge. However, Molinists clearly do want to affirm the fact of God possessing middle knowledge; yet, again, the question can be raised,⁶ if CCFs are taken to be true — with the assumption being made that neither God nor the individuals described in the propositions make them true — then what are, in fact, the truthmakers for them? I believe that we can find a sufficient answer to this question by ourselves questioning the key assumption made by Molinists and the grounding objectors that there is, in fact, nothing that exists to ground the truths of a CCF. That is, I believe that the truth of a given CCF can indeed be grounded in the individuals and circumstances that they refer to. And we can begin to understand how by turning our attention away from the notion of *actualism* — which has been frequently assumed by

5 Alexander Zambrano, “Truthmaker and the Grounding Objection to Middle Knowledge”, *Aporia* 21 (2011): 22.

6 The term ‘molínist’ is the standard term used in reference to a proponent of the doctrine of middle knowledge.

proponents and detractors of the doctrine of middle knowledge — and toward the notion of *possibilism* and a specific possibilist metaphysical thesis provided by David K. Lewis (as modified by Kris McDaniel and Philip Bricker). Utilising this notion and metaphysical thesis will provide a means for us to acquire the much needed ‘pre-volitional truthmakers’ for the CCFs within God’s middle knowledge, and thus a Molinist can indeed continue to affirm their possible truth.

1.2 Middle knowledge and Two Conceptions of Modal Realism

In contemporary metaphysics, a number of philosophers have seen the relative merit in utilising the notion of a ‘possible world’ to bring further clarity to various modal matters. Following Peter van Inwagen,⁷ we can take the concept of a possible world to be a *functional concept*. The concept of a ‘possible world’ is one that ‘plays a certain role’ in *representing ways reality is or could be*. That is, as van Inwagen notes,⁸ at a general level, it ‘can fill a certain role in philosophical discourse about modality, essence, counterfactuality, truth-theories for natural languages, and so on.’ One important function that the concept of a possible world has fulfilled within a modal context is that of providing an explication of the important notion of *de dicto* modality, which can be stated succinctly through the following bi-conditional:

- (3) (De Dicto) It is possible that $x \leftrightarrow$ there is a w such that w is a possible world and at w , x .

As expressed by (3), the modal operator ‘it is possible that’ (and modal operators such as ‘it is necessary that’), within a modal metaphysics that utilises ‘possible world semantics’, is now conceived of as a quantifier over worlds, which thus provides a further explication and/or analysis of modality — and helps to dispel the mystery that has often surrounded these type of locutions. In addition to the provision of an analysis of *de dicto* terms, the utilisation of the notion of possible worlds also provides a means for one to analyse *de re* modality. However, the nature of this type of analysis is best grasped once the concept of a possible world is further fleshed out. In the contemporary lit-

⁷ Peter van Inwagen, “Two Concepts of Possible Worlds”. *Midwest Studies In Philosophy* 11 (1986): 192–193.

⁸ *Ibid.*, 193.

erature, two specific realist metaphysical theses concerning the nature of the concept of a possible world have played an influential role: Concrete Modal Realism and Abstract Modal Realism. Concrete Modal Realism (hereafter, Concretism), proposed by David K. Lewis,⁹ is a *possibilist* theory (i.e., one that takes there to exist merely possible entities that are strictly non-actual), that seeks to provide a *reductionist* account of modality (i.e., it seeks to reduce modal notions to non-modal notions) and conceives of a possible world as a concrete object — and thus there being an infinite plurality of concrete possible worlds (amongst other things). By contrast, Abstract Modal Realism (hereafter, Abstractionism),¹⁰ proposed by Alvin Plantinga,¹¹ is an *actualist* theory (i.e., one that denies the existence of merely possible entities and takes the actual world to be the only possible world that does obtain), that seeks to provide a *non-reductionist* account of modality (i.e. it does not seek to reduce modal notions to non-modal notions) and conceives of a possible world as an abstract object — and thus there being an infinite plurality of abstract possible worlds (amongst other things). Hence, what we are presented with through these metaphysical theses are two ontological concepts ('concreteness' and 'abstractness') — concerning two types of objects — that are coextensive with the functional concept 'possible world'.

Now, for the doctrine of middle knowledge, contemporary Molinists have focused on fleshing out the central tenets of the doctrine utilising the language of possible worlds. Doing this allows one to re-construe the nature of the logical structure of God's knowledge as such:

9 David K. Lewis, *On the Plurality of Worlds* (Blackwell, 1986).

10 I follow van Inwagen in terming these theses 'Concretism' and 'Abstractionism'. Furthermore, Lewis' Concretism is usually termed 'genuine' modal realism — with Plantinga's Abstractionism frequently not being termed a modal realist account. However, following Alvin Plantinga, *Essays in the Metaphysics of Modality* (Oxford Univ. Press: 2003), 192–228 in identifying his thesis as a modal realist thesis, I will break convention here in taking both theses to be alternative modal realist accounts. Despite this, however, subsequent to this section I will be using the general term 'modal realism' to refer to Concretism rather than Abstractionism.

11 Alvin Plantinga, *The Nature of Necessity* (Oxford Univ. Press, 1974).

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Knowledge	God's essential knowledge of all possible worlds. The content of which includes all logical necessities and an infinite range of possible combinations of entities.	God's essential knowledge of all feasible worlds. The content of which includes knowledge concerning what any free individual would do under any possible set of circumstances.	/	God's knowledge of the actual world. The content of this knowledge is not essential to God.

Table 1.2 Logical Structure of God's Knowledge (i)

At the ontological level, however, this re-construal of the doctrine of middle knowledge through the usage of possible world semantics has been done solely within an Abstractionist framework, as, first, Flint, a prominent Molinist,¹² states that 'there are possible worlds—states of affairs that both possibly obtain and are maximal, where a maximal state of affairs is one such

¹² Flint, *Providence*, 6.

that every other state of affairs is either included or precluded by it'. Flint then goes on to distance himself from the Concretist position by stating that 'Possible worlds...are not, *pace* David Lewis, material things'.¹³ Second, following Plantinga,¹⁴ most contemporary Molinists conceive of CCFs as not representing 'real', 'flesh' and 'blood' concrete entities but adopt the notion of an (abstract) individual essence, and thus interpret a CCF, as Craig (1990, 254)¹⁵, another prominent Molinist writes, as a proposition that states that 'If individual essence *P* were instantiated in circumstances *C* at time *t* and its instantiation were left free with respect to action *A*, the instantiation of *P* would freely do *A*. Thus, taking each of these modifications into account, the doctrine of middle knowledge — as conceived of within the Abstractionist framework — states that, in the first logical moment, God possesses knowledge (i.e., natural knowledge) of what individual essences could do, if instantiated in certain circumstances, in the infinite set of possible worlds — where a possible world is construed as a maximally possible state of affairs. In the second logical moment, God possesses knowledge (i.e. middle knowledge) of what each individual essence would do, if instantiated in certain circumstances, in the infinite subset of feasible worlds. Logically subsequent to this, God then freely chooses to actualise one of the feasible worlds, which then results in the third logical moment, where God possesses knowledge (i.e. free knowledge) of what each individual essence will do in the specific circumstances of the actual world. This construal of the doctrine of middle knowledge, however, still faces the GO as there are no truthmakers for the CCFs that are part of God's middle knowledge, given the fact that there is nothing, *prevolitionally*, that can ground their truth — as an individual essence, which is an (abstract) possible instantiation of an individual, is not itself an individual. What will be of importance now in helping us to deal with the GO is that of providing an elucidation of the doctrine within a new framework — namely, a Concretist framework. However, to achieve this end, it will be important to now firstly detail the nature of the most prominent construal of Concretism and then proceed to apply it to the task at hand.

13 Ibid., 52.

14 Plantinga, *Nature*.

15 Craig, *Divine*, 254.

Thus the plan of action is as follows: in sections II ('Grounding Middle Knowledge: Phase-One'), I unpack Lewis' construal of Concretism and apply it to the task at hand, which provides a solution to the GO that is, however, plagued with other important problems. Hence, in section III ('Grounding Middle Knowledge: Phase-Two'), I unpack an alternative construal of Concretism provided by combining the work of Kris McDaniel and Philip Bricker and apply it to the task at hand, which will allow one to utilise the solution to the GO detailed previously, whilst also not being plagued by the issues raised previously as well. The GO will thus be found to be inapplicable to the doctrine of middle knowledge, as conceived of through a (Concretist) modal realist framework. Finally, there will be a concluding section ('Conclusion') that will summarise the position that has been argued for in this article.

II. GROUNDING MIDDLE KNOWLEDGE: PHASE-ONE

II.1 The Nature of Lewisian Realism

According to David K. Lewis, Concretism is a metaphysical thesis that posits the existence of a 'logical space' or 'pluriverse' that is made up of an infinite plurality of concrete possible worlds.¹⁶ More specifically, the central tenets of Concretism, according to Lewis,¹⁷ which we can call *Lewisian Realism* (hereafter, LR), can be stated as follows:

16 In Lewisian Realism, there are no 'impossible worlds', and thus one can refer to a 'possible' world simply as a possible world. However, to keep in line with Abstractionism — which allows for impossible worlds — the qualifier 'possible' will be retained throughout.

17 Lewis, *Plurality*, 69–81.

- (4) (Lewisian Realism)
- (a) *Pluriverse*: The totality of metaphysical reality and the largest domain of quantification that includes within it three ontological categories.
 - (b) *Concrete Fusion*: A possible individual x is a possible world w if there are some concrete entities such that each one of the entities is spatiotemporally related to every object that is one of the collections of entities, w is the fusion of these entities, and w is one of an infinite plurality of w s.
 - (c) *Isolation*: No possible individual x , that is part of a w , is spatiotemporally related to any x that is not one of the collections of individuals that are part of w .
 - (d) *Relative Actuality*: A possible individual x is an actual world w solely from the indexical perspective of an inhabitant of w .

For (a), the notion of the ‘Pluriverse’ functions in the framework of LR as the metaphysical terrain of the totality of reality. In Lewis’s thought, the pluriverse is organised into three fundamental ontological categories: *possible individuals*, *impossible individuals* and *non-individuals*. These three ontological categories can be understood as follows: first, the category of possible individuals includes within it the entities that exist wholly within a possible world, i.e., as a part of that world. For the category of possible individuals, each of the worlds within the pluriverse is a (large) possible individual that has (smaller) possible individuals (such as atoms, humans and planets) as parts. Hence, any possible individual is ‘bound’ to a possible world through being a ‘part’ of it — with a possible world being an improper part of itself. Second, the category of impossible individuals includes within it the entities that do not exist wholly in any world, but are composed of possible individuals from two or more worlds. For the category of impossible individuals, these types of individuals are mereological summations of individuals within the pluriverse. More specifically, impossible, cross-world, individuals consist of parts from several distinct worlds within the pluriverse. As the name indicates, however, this type of individual is not a possible individual, as it is not in any world — it is partly in each of the many worlds. Third, the category of non-individuals

includes within it the entities which do not exist in any world, but nevertheless exist ‘from the standpoint of a possible world’. That is, for the category of non-individuals, these types of entities — which are paradigmatically identified as ‘pure sets’ (i.e., numbers, properties, propositions and events) — do not exist in any world in the sense of them existing as a part of a possible world, nor do they exist as a mereological summation of the individuals that exist within the infinite number of distinct worlds; rather they exist from the *standpoint of a possible world*, by existing within the least restricted domain that is appropriate in evaluating the truth at the world of quantifications.

Thus, for Lewis, within the LR framework, we have three fundamental ontological categories: possible individuals, impossible individuals and non-individuals, that are individuated by three distinct relations: being in a possible world (i.e., being part of a possible world) for possible individuals, being partly in a possible world (i.e., having a part that is wholly in that world) for impossible individuals, and existing from the standpoint of a possible world for non-individuals. For illustrative purposes, we can depict the nature of the pluriverse as follows (where ‘PI’ stands for ‘possible individual’, ‘IPI’ stands for ‘impossible individuals’, ‘N-I’ stands for ‘non-individuals’, ‘Wⁿ’ stands for a ‘particular world’, ‘the starred circles’ represents ‘(relative) actuality’, ‘Concrete’ stands for ‘concrete domain’ and ‘Abstract’ stands for ‘abstract domain’):

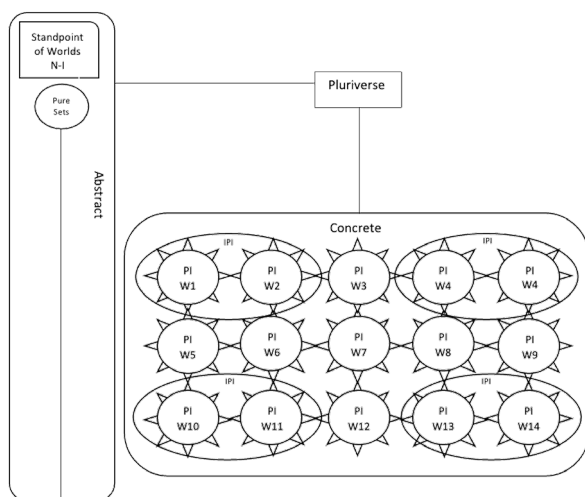


Figure 1.1 Nature of the Pluriverse

Now, the positing of the existence of the pluriverse enables one to provide a *reductive account of modality*. That is, LR, through the notion of the pluriverse (and, more importantly, the notion of a possible world), seeks to provide an analysis or reductive account of modal notions such that one can understand the meaning of modal locutions without them depending upon further modal notions — namely, these locutions being reducible to concrete possible worlds — and thus modality not being primitive. To further explicate the metaphysical thesis of LR, and its modal reductionism, it will be important to now further detail the notion of a possible world, as expressed by (b) — (d) of (4).

For (b), the notion of ‘Concrete Fusion’ expresses the fact that there exists an infinite plurality of concrete possible worlds within logical space that are identified as *maximal mereological sums of spatiotemporally related individuals*. The ‘concreteness’ of a possible world expresses the idea that the ‘merely possible worlds’ that make up the pluriverse are of the *same ontological kind* as the ‘actual world’. Lewis,¹⁸ however, is hesitant to directly affirm the concreteness of possible worlds, given the ambiguity and lack of clarity that surrounds the abstract/concrete distinction in contemporary philosophy. Nevertheless, Lewis distinguishes four different ways of conceiving of the abstract/concrete distinction, and the manner in which worlds fit with these ways.¹⁹ First, the *Way of Example*: worlds have parts that are taken to be paradigmatically concrete (i.e., donkeys, protons, stars and galaxies). Second, the *Way of Conflation*: worlds are taken to be particulars and individuals, rather than universals and sets. Third, the *Negative Way*: worlds have parts that are taken to stand in spatiotemporal relation to one another. Fourth, the *Way of Abstraction*: worlds are taken to be fully determinate entities that are not abstractions from any other entity. In each of these four ways, according to Lewis,²⁰ worlds (and most of their parts) can be conceived of as concrete entities — with all other types of entities (namely, non-individuals) being conceived of as abstract entities, due to the fact that these entities are not spatiotemporal *and* fail to meet the four-fold criteria. So, a possible world is a concrete entity, yet, there is not only one world in logical space, but an ‘infinite plurality’ of

18 Lewis, *Plurality*.

19 Ibid., 82–86.

20 Ibid., 82.

worlds. More specifically, *any way a possible world could possibly be is a way that some world is* — in short, according to the *Principle of Plenitude*, worlds are abundant such that there are no ‘gaps in logical space’. In underwriting this principle, Lewis posits the holding of a more specific principle: *the Principle of Recombination*, according to which, as Lewis writes,²¹ ‘patching together parts of different possible worlds yields another possible world’. More specifically, the Principle of Recombination states that *anything can co-exist, or fail to co-exist, with anything else*. Thus, for example, as Lewis (1986, 88)²² notes, ‘if there could be a dragon, and there could be a unicorn, but there couldn’t be a dragon and a unicorn side by side, that would be an unacceptable gap in logical space, a failure of plenitude’. Thus, from the first half of this principle — that anything can co-exist with anything else — as illustrated by this example, we infer that any number of entities from different worlds can be brought together in any world, in any specific arrangement permitted by shape and size. However, for the second half of the principle — that anything can fail to co-exist with anything else — we have the example, as Lewis writes, that ‘if there could be a talking head contiguous to the rest of a living human body, but there couldn’t be a talking head separate from the rest of a human body, that too would be a failure of plenitude.’²³ We thus infer from this half of the principle, which expresses the Humean denial of necessary connections between distinct entities, that there is another world where one of these entities exists without the other.²⁴ Thus, for the Principle of Recombination as a whole, anything can co-exist with anything, and anything can fail to co-exist with anything, so long as they are able to come together within the possible size and shape of spacetime that comprises the world that they are parts of. The pluriverse is thus made up of an *infinite number (and variety) of concrete possible worlds*.

For (c), the notion of ‘Isolation’ expresses the fact that there are no connections between worlds in the pluriverse — in that a given possible world is *spatiotemporally (and causally) isolated from other worlds*. The lack of spati-

21 Ibid., 88–89.

22 Ibid., 88

23 Ibid., 88.

24 However, as worlds do not overlap in the LR framework, this principle is to be understood in terms of *intrinsic duplication* — a given world is composed of duplicates of the entities that are brought together from other worlds.

otemporal and causal connections between worlds results in the inhabitants of a given world being ‘world bound’. More specifically, a possible world is demarcated as a maximal individual whose parts are spatiotemporally related to one another and *not* anything else. That is, a possible world, according to Lewis,²⁵ has possible individuals as parts, and is thus ‘the mereological sum of all possible individuals of one another’. In a possible world, if two things are parts of the same world, then they are — what Lewis terms — *worldmates*.²⁶ Individuals are thus worldmates if, and only if, they are spatiotemporally related. Thus, whatever is in a spatiotemporal relation with another is *part of that world*. A possible world is therefore unified, as Lewis notes, ‘by the spatiotemporal interrelation of its parts.’²⁷ However, there are no spatiotemporal relations that connect one world to another. That is, each world — which is simply the (maximal) mereological fusion of a certain set of concrete entities — is *spatiotemporally isolated* from every other world, as Lewis writes, ‘Worlds do not overlap; unlike Siamese twins, they have no shared parts....no possible individual is part of two worlds.’²⁸ In other words, as the spatiotemporal relation is an equivalence relation, each individual (that is, in a possible world) is part of exactly one world — there is no overlap between distinct worlds; rather, each world is *spatiotemporally isolated* and exists *as* the maximal sum of all of the individuals that are spatiotemporally related to it.

For (d), the notion of ‘Relative Actuality’ expresses the fact that all of the (‘merely possible’) worlds within the pluriverse have the *same ontological status* as the ‘actual world’ — such that the notion of actuality is an *indexical* term that simply singles out the specific utterer of the sentence in the particular world in which they are located. In Lewis’s mind,²⁹ actuality is a *relative* notion, such that each world is actual relative to itself and the individuals that inhabit it (and is thus non-actual relative to all the other worlds and individuals that inhabit those worlds). For Lewis, actuality is an indexical notion. That is, the word ‘actual’ is to be analysed in indexical terms, which is that of its reference varying dependent upon the relevant features of the context of utterance. That is, as Lewis notes, ‘According to the indexical analysis I propose,

25 Lewis, *Plurality*, 69.

26 *Ibid.*, 69.

27 *Ibid.*, 71.

28 Lewis, *Philosophical*, 39.

29 Lewis, *Plurality*, 92–96.

‘actual’ (in its primary sense) refers at any world w to the world w .³⁰ ‘Actual’ is analogous to ‘present, an indexical term whose reference varies depending on a different feature of context’. Thus, something *being actual* to a given individual is that of it being part of the world that the individual inhabits — in other words, it is *spatiotemporally related* to that specific individual. Every world is thus *actual at itself*, which renders all worlds as being on par with one another. Thus, no world has the ontological status of being *absolutely actual* — the merely possible worlds are not to be distinguished from the ‘actual world’ in ontological status. This is the nature of the pluriverse and the various worlds that exist within it. So, with this in hand, we can now turn our attention back onto assessing how LR provides a means for one to analyse *de re* modality.

According to Lewis, the analysis of *de re* modal statement is best provided through *counterpart theory*, which brings together the central tenets of LR found in (4). More specifically, within the framework provided by LR, worlds within the pluriverse do *not* overlap, and thus individuals do not exist in more than one world. Rather, each possible individual has counterparts — qualitatively similar individuals — that exist in other worlds. More precisely, a counterpart of an entity x is one that exists in a distinct world w from x and resembles x more closely than anything else that exists in w . For Lewis,³¹ the counterpart relation — instead of the notion of *transworld identity* — is the specific resemblance relation that holds between distinct individuals that are inhabitants of distinct worlds, and thus it provides the grounds for an analysis of *de re* modal analysis, which can be expressed through the following biconditionals:

- (5) (De Re-P) x is possibly $F \leftrightarrow$ there is a possible world w
and a counterpart x^* , such that in w x^* is F .
- (6) (De Re-N) x is necessarily $F \leftrightarrow$ for every world,
 w , all counterparts of x are F .

Counterpart theory thus provides the truth conditions for the modal properties that are possessed by a certain entity — and as the notion of resemblance

30 David K. Lewis, “Anselm and Actuality.” In *Particulars, Actuality, and Identity over Time Vol 4* (Routledge, 1999), 293.

31 Lewis, *Plurality*, 8–11.

which underpins this theory is itself a non-modal notion — modal locutions are able to be explained without reference to modal notions. Counterpart theory thus allows modal statements and locutions (e.g., x is possibly F) to be reduced to the non-modal (i.e., counterpart of x is F). Within the framework of LR, one thus has a means of reducing the diversity of modal notions that have usually been taken as primitive.

Hence, within the LR framework, the modal structure that determines the truth or falsity of modal statements is identified as the infinite plurality of worlds that fill up logical space, which we can believe to be true, as Lewis notes, ‘because the hypothesis is serviceable, and that is a reason to think that it is true.’³² That is, we should believe in the existence of the pluriverse — which includes within it an infinite plurality of worlds (and counterparts) — due to the fact that this supposition is pragmatically virtuous. Lewis thus believes that in affirming the veracity of the framework that is provided by LR, one must perform a cost-benefit analysis. That is, affirming the truth of LR comes at a certain price. However, according to Lewis, this is a price worth paying, as, on balance, LR costs less than alternative theories that provide the same benefits but procure more serious costs. For now, we will take Lewis on his word that the benefit of *his* version of LR is worth the cost — however, we will see that, within a theological context, these costs might come at too high a price. Nevertheless, we can now to apply the thesis of LR to the task at hand, which will provide a means of dealing with the GO.

II.2 Grounded Middle Knowledge: Phase-One

As noted previously, the doctrine of middle knowledge conceives of God’s knowledge as being structured into three logical moments: natural knowledge, middle knowledge and free knowledge — with God’s creative activity being placed between his middle knowledge and free knowledge. By placing God’s middle knowledge prior to his creative activity, genuine human freedom can be maintained, yet God can still exercise sovereign control over the totality of reality. Despite the great benefit provided by affirming the truth of God’s possession of middle knowledge, there remains an important problem: the GO, which raises an issue concerning the grounds of the truth of the CCFs

32 Lewis, *Plurality*, 3.

that are part of middle knowledge. That is, within the Molinist framework, there seem to be no truthmakers for the CCFs that feature in God's middle knowledge and thus, because of this, God cannot have middle knowledge. Now, within the current metaphysical framework, one can indeed side with the Grounding Objectors on this point; however, all is not lost, as we can now re-construe the doctrine of middle knowledge within the modal metaphysical framework of Lewis, which will help us to deal with this objection. We can proceed to do this as follows by: first, positing the existence of a 'pluriverse' that is made up of an infinite plurality of concrete possible worlds — where any way a possible world could possibly be is a way that some world is. Thus, there are no gaps in the pluriverse. Second, the occupants of the pluriverse, as just mentioned, are the infinite plurality of concrete possible worlds that are to be identified — not as maximal possible states of affairs, as is found within the Abstractionist position — but as maximal mereological sums of spatiotemporally related individuals. Thus, a world, unlike that again of the Abstractionist position, is not an abstract entity but is concrete in the fullest sense of the word — in short, possible worlds are made up of 'real, 'flesh and blood entities' and not a combination of abstracta (such as states of affairs). Third, in the pluriverse, there are no connections between worlds — that is, worlds do *not* overlap. Rather, each possible world is a *spatiotemporally (and causally) isolated individual*, which entails the fact of the inhabitants of each of these worlds being world-bound. Hence, each possible world-bound individual has counterparts — qualitatively similar individuals — in other worlds, who serve as the truthmakers for modal states concerning these individuals. Lastly, as each of the possible worlds within the pluriverse has the *same ontological status* as the 'actual world' — actuality is relative to the inhabitants of each of the possible worlds within the pluriverse.

Taking into account the specific metaphysical picture of reality (i.e., the pluriverse) that is before us, one can ask the important question now of where exactly God is to be located within this view of reality. Within the Molinist framework under study — and in line with traditional theology — God is conceived as being an entity that exists necessarily, which, in a general possible worlds framework, is construed as his existing in every possible world. So in answer to our question, it seems as if God is to be located in every possible world. However, this answer would surely be mistaken, as within the LR framework — as expressed by (6) — a given entity is world-bound, and

thus if this entity exists necessarily, then this is to be conceived of as his having counterparts that exist in every other world. Hence, if God exists within the pluriverse, then he would also be a world-bound entity who has other duplicates — God-like counterparts — that exist in the other worlds across the pluriverse. Yet, this is clearly a problematic transgression of monotheism due to the fact of there is not solely one God that resides within every world within the pluriverse. There is thus a clear incompatibility between the LR framework and the traditional understanding of God (held by Molinism and other views of divine providence), which aims to uphold God's uniqueness. Let us call this problem the Problem of Plurality (hereafter, PP). Now, one way to deal with this issue, suggested by Ross Cameron³³, and further developed by Michael Almeida³⁴, is to take God to be an entity that is not located within the category of possible individuals — which would thus require him to exist in a world — but instead proceeding to locate God within the non-individuals category: God exists within the domain of abstract entities — that is, God's mode of being is his existing with the *status* of an abstract entity. More specifically, within the pluriverse, the domain of abstract entities includes the category of non-individuals, with the instances of this category each existing at *the standpoint of a world* — where an entity exists from the standpoint of a world if, as noted previously, it 'belongs to the least restricted domain that is normally...appropriate in evaluating the truth at that world of quantifications'. God does not exist wholly or partly *at any world* — and thus is not conceived of within this mode of existence as a possible or impossible individual. Rather, as with other necessary abstract entities (i.e., pure sets), God exists from the standpoint of *every world*. One can thus take God to be *among* the objects that exist from the standpoint of each world. In other words, God has the *same ontological status* as abstract entities. It will be helpful to now illustrate God's location from the standpoint of every world within the pluriverse, which can be done as such:

33 Ross Cameron, "God Exists at Every (Modal Realist) World: Response to Sheehy," *Religious Studies* 45, (2009), 95–100.

34 Michael J. Almeida, "Theistic Modal Realism I: The Challenge of Theistic Actualism." *Philosophy Compass* 12 (7): 1–13 (2017a); "Theistic Modal Realism II: Theoretical Benefits." *Philosophy Compass* 12 (7): 1–14 (2017b).

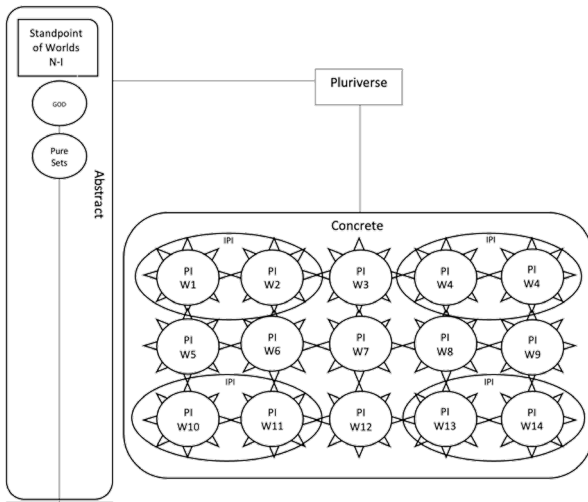


Figure 1.2 God's Pluriverse Location (i)

In locating God within the pluriverse, one can thus take God to be a non-individual that exists at the standpoint of every world. This might indeed deal with PP. However, one can ask the further question: if God has the status of an abstract entity, then can he be held to be providentially in control of the other entities within the pluriverse? That is, abstract entities are usually taken to be causally inert.³⁵ So how could God be in any way causally active from the standpoint of every world if he also shares in the same status as these abstract entities? One could say that he has the status of an abstract entity without sharing the same qualities as this type of entity in all respects.³⁶ This is a potential way out of the problem; however, issues of *ad hoc*ness could indeed

35 For other issues raised against locating God at the standpoint of every world, see Sheehy, "Response", 102–103 and Matthew J. Collier, "God's Necessity on Anselmian Theistic Genuine Modal Realism." *Sophia* 58 (2019): 345–346.

36 This response has been suggested by Almeida, "Realism I"; 6. Matthew J. Collier, "God's place in the world." *International Journal for Philosophy of Religion*, 89 (2021), 59 has also helpfully shown that it is not necessary (or sufficient) for an entity to be an abstract entity (with all the features of it), simply due to its sharing in an abstract status by its existing from the standpoint of a given world, as Lewis, *Plurality*, 83 himself allows *impure sets* to exist at a world—and not from the standpoint of a world—while such entities remain abstract rather than concrete.

be raised, and thus one might prefer to approach this issue in a different way. We will focus on exploring that way in the subsequent sections; however, we will need to park this issue to the side now but keep in mind that the Modal proposed solution, if successful against the GO, potentially might have further issues that will stop it from being adopted.

Focusing our attention back on the GO, we can now detail how the solution to the GO — which we can term the Modal Realist Solution — can potentially provide us with a successful response to this objection. Within the Molinist framework, God is taken to have a certain structure to his knowledge that centres around three logical moments: natural knowledge, middle knowledge and free knowledge. However, within LR, these moments are to be construed now as follows: in God's natural knowledge, God knows from the infinite set of concrete possible worlds (i.e., maximal mereological sums of individuals) what each of the individuals in those worlds *could* do in each of the circumstances that they find themselves in. Then, in God's middle knowledge, there is then an infinite subset of feasible concrete worlds, where God will know what each of these individuals of those worlds would do in the circumstances that they find themselves in. Now, the reason why this is not subject to the GO is due to the fact that the entities that are present within God's natural and middle knowledge (i.e. the concrete possible and feasible worlds) already exist prior to any action of his will — these entities necessarily exist — and, thus, we can take the truthmakers of the CCFs that are part of God's middle knowledge to be the individuals and circumstances that they refer to. That is, within the pluriverse, each of the individuals that are part of a possible world is *not* an individual essence, and the circumstances that they are in are *not* states of affairs; rather, these individuals are 'real', 'flesh and blood' entities that necessarily exist in the same manner that we do.³⁷ Hence, the propositions featured in a given CCF are *not* true prior to the existence of these entities. In other words, CCFs appear to have a ground for their truth — namely, that of the concrete worlds and individuals that they refer to. Thus, we can now succinctly state the Modal Realist Solution as follows

37 That is not to say that all of these individuals are necessary beings (i.e., entities that have counterparts in every world).

(where, again, 'c→z' represents a 'Counterfactual of Creaturely Freedom' and now x stands for 'concrete feasible worlds').³⁸

- (7) (Modal Realist Solution¹) There are truthmakers: the concrete possible worlds (i.e., maximal mereological sums of individuals) and counterparts, that cause (or are sufficient for) the truth of Counterfactuals of Creaturely Freedom.

$$[\exists x [x \rightarrow (c \rightarrow z)].$$

Given this, there is thus no GO that can be raised against the current proposal. With the previous construal of the doctrine of middle knowledge, this notion was expressed within an Abstractionist framework that did not affirm the existence of non-actual worlds and individuals. Hence, as the CCFs are true prevolitionally, there is nothing existing that can serve as the truthmakers for the CCFs within that metaphysical framework. This is not the case, however, if one adopts the LR framework detailed here, as this framework affirms the existence of non-actual worlds and individuals. Ergo there are things that can serve the role of being the truthmakers for the CCFs. This is indeed a great result; however, two important issues against this proposal can be raised, which is, first, that of there being independently existing entities and, second, that of there now being no room for God's free, creative activity within this framework and the free knowledge that is a result of this. For the former, we have the issue of there being certain entities — namely, the concrete possible worlds and their inhabitants — that exist independently of God. That is, God does not serve as the source of these realities, given the fact that their existence is a necessary facet of the reality of the pluriverse. This is an issue, however, as individuals will want to affirm God's sovereign role in being the source of all of reality — let's call this issue the Problem of Independence (hereafter, PI). Focusing now on the latter issue, we noted previously that, within the LR framework, actuality is conceived of as an indexical notion, and thus each of the concrete possible worlds within the pluriverse are entities that not only necessarily exist but are also necessarily actual. Given this, however, God thus

38 More specifically, it is 'facts' about the following entities that serve as truthmakers, rather than that of the entities themselves. However, for ease of writing, I will continue to refer to the entities themselves as fulfilling this important role.

lacks the freedom to actualise the worlds that he desires to actualise. Now, by one losing God's creative activity within the LR framework, there are serious implications for the structure of God's knowledge. More specifically, on the basis of the relative actuality of each of the worlds within the pluriverse, God's knowledge of what *would* happen in a given world is, in fact, now identical to the knowledge of what *will* happen in that world. This is due to the fact that there is no free creative decision that can transform a merely feasible world into the actual world — as all of the worlds are, in fact, actual independent of God. Hence, all the concrete possible worlds, with the potential gratuitous evil that plagues some of them, are as actual as our world, despite the fact that God's perfect goodness would be incompatible with a vast number of these worlds (and thus it is plausible that God would desire for these worlds to not be actual — though he would not be able to do anything about this). Thus, we seem forced to let go of one of the motivating reasons for holding onto the doctrine of middle knowledge — namely, that of one maintaining God's sovereign providential control over reality — let's term this issue the Problem of Actuality (hereafter, PA). Now, given PA, the logical structure of God's knowledge is to be construed as such (where middle knowledge is now to be termed 'quasi-middle knowledge', given the fact that it now does not sit within middle and free knowledge but is instead now identified, in part, with free knowledge):

Logical Structure	1. Natural Knowledge	2. Quasi-Middle Knowledge
Truths	Necessary and Independent of God's free will Everything that 'could' happen.	Contingent and Independent of God's free will Everything that 'would'/'will' happen.
Knowledge	God's essential knowledge of all concrete possible worlds (i.e. maximal mereological sums of individuals). The content of this includes all logical necessities and an infinite range of possible combinations of individuals.	God's essential knowledge of all feasible concrete worlds (i.e. maximal mereological sums of individuals). The content of this includes knowledge concerning what any free individual would/ will do under any possible set of circumstances.

Table 1.3 Logical Structure of God's Knowledge (iii)

On the basis of the necessary existence of the infinite plurality of concrete possible worlds that make up the pluriverse and the specific individuals that are inhabitants of these worlds, there is no GO. However, dealing with the GO in this way can come at the potential cost of losing God's sovereign control over all of reality that is provided by his creative choice of which world amongst the feasible worlds would in fact be actual. God doesn't have this choice in this framework as every world is, in fact, actual, and thus God lacks this control and the free knowledge that is a necessary result of this creative choice. The cost of this and the previously mentioned PP seems to be too high a cost to pay for the benefit provided by the Modal Realist Solution to the GO. However, the Molinist who sees the benefit gained in dealing with the GO in the manner that has just been detailed is now faced with the question of: is there a way to continue to keep the GO at bay whilst still not allowing the PP, PI and PA to spring up? I believe that there is, through us focusing and further refining our Concretist model. This specific refinement can be made by adopting elements of two alternative versions of modal realism: *Modal Realism with Overlap* — proposed by Kris McDaniel — and *Leibnizian Realism* — proposed by Philip Bricker, which, when brought together, we can term *Leibnizian Realism with Overlap*.³⁹ The thesis of Leibnizian Realism with Overlap will provide a means for one to deal with the GO, without facing the PP, PI and AP. It will be helpful to now turn our attention to further unpacking the nature of this metaphysical thesis, and then, subsequent to this, we can focus on applying it to the task at hand.

39 A nucleus version of Leibnizian Realism with Overlap is found in the work of Kris McDaniel, "Modal Realisms." *Philosophical Perspectives*, 20 (2006): 303–31 in the form of his 'MRO2' and 'Actualist Possibilism' theses. However, there are certain important moves made here that help distinguish it from these two theses, and thus the present thesis should be viewed as an original extension of McDaniel's work.

III. GROUNDED MIDDLE KNOWLEDGE: PHASE-TWO

III.1 *The Nature of Leibnizian Realism with Overlap*

According to Kris McDaniel and Philip Bricker,⁴⁰ another possible version of Concretism — Leibnizian Realism with Overlap (hereafter, LRO) — takes the worlds that make up the pluriverse to be similar to the worlds that are postulated by LR — in that both theses conceive of worlds as ‘concrete’ objects that are maximal spatiotemporal entities. However, in the framework provided by LRO, worlds, *contra* Lewis, are *not* defined as maximal mereological sums of individuals. Rather, a given world is a ‘concrete’ object that is a *maximal region of spacetime* that has objects as occupants (not parts), is spatiotemporally isolated from other worlds, and is absolutely actual — by being an instance of the category of actuality and bearing the property of actuality. More specifically, the central tenets of LRO can be stated as follows:

- (8) (Realism*)
- (e) *Pluriverse*: The totality of metaphysical reality and the largest domain of quantification that includes within it three ontological categories.
 - (a) *Concrete Regions*: A possible individual x is a world w if and only if w is a region of spacetime R and no R , which is part of w , is spatiotemporally related to anything that is not part of w .
 - (b) *Overlap*: A possible individual x is at w if x is wholly present at an R that is part of w .
 - (c) *Absolute Actuality*: A possible individual x is an actual world w if w is part of the fundamental category of actuality and thus possesses a greater degree of being than the possible worlds that are not part of this category.

Within the framework of LRO, the tenet of Pluriverse (i.e. that there exists an infinite plurality of concrete worlds) is maintained in the modification that is

40 Kris McDaniel, “Modal Realism with Overlap.” *Australasian Journal of Philosophy* 82 (2004): 137–52; Philip Bricker, “Island Universes and the Analysis of Modality.” In *Reality and Humean Supervenience: Essays on the Philosophy of David Lewis*, edited by Gerhard Preyer and Frank Siebelt (Maryland: Rowman & Littlefield, 2001), 27–56; “Absolute Actuality and the Plurality of Worlds.” *Philosophical Perspectives*, 20 (2006a), 41–76; “Concrete Possible Worlds.” In *Contemporary Debates in Metaphysics* (Blackwell, 2007), 111 — 134.

made to LR by this version of modal realism, with solely the tenets of Concrete Fusion, Isolation and Relative Actuality being replaced with the tenets of Concrete Regions, Overlap and Absolute Actuality, each of which we can now briefly unpack.

For (b) and (c), the notions of ‘Concrete Regions’ and ‘Overlap’ express the fact of there being an infinite plurality of worlds that are identified as *maximally spatiotemporally related regions of spacetime* that have objects as occupants of those regions. Worlds are spatiotemporally isolated maximal regions of spacetime — rather than the maximal summation of the things that they contain — such that, as McDaniel notes,⁴¹ ‘worlds are containers in the same sense that regions of spacetime are containers’. These regions of spacetime — instead of the material objects that they contain — are ‘parts’ of worlds. In other words, the primary way in which LRO conceives of an object being ‘contained’ within a world — that is, it existing at a specific world by occupying a spatiotemporal region — is that of it being *wholly present* at that region, without being a part of that region. At a more precise level, an object *x* exists at a world, as McDaniel writes,⁴² if, and only if, ‘there is some region *R* such that (i) *x* is wholly present at *R* and (ii) *R* is a part of *w*; a region *R* exists at a world iff it is a part of that world’. Hence, according to LRO, the ‘atness’ relation within a world reduces to *occupation*. A specific object is thus *at* more than one world by it occupying a particular region that is part of one of the worlds, whilst it also occupying a different region that is part of one of the other worlds within the pluriverse. Material objects, as McDaniel notes,⁴³ thus ‘enjoy multi-location’.⁴⁴

In addition to the account of ‘existing at a world’ provided by LRO, we also have an account of what it is for a particular object to have a ‘part at a world’ and a ‘property at a world’. For the former notion, an entity *x* is a part of an entity *y* at world *w*, according to McDaniel,⁴⁵ if and only if ‘there is some *R* such that *x* is part of *y* at *R* and *R* is a part of *w*’. Objects thus have parts *at* parts of worlds. That is, assuming *compositional pluralism* — the thesis that

41 McDaniel, “Overlap”, 147.

42 Ibid., 147.

43 McDaniel, “Realisms”, 306.

44 For a definition for what it is to be wholly present in a region, see Cody Gilmore, *Location and Mereology*. *Stanford Encyclopedia of Philosophy* (2018).

45 McDaniel, “Overlap”, 148.

there are two different fundamental part-whole relations — the fundamental parthood relation for *spacetime regions* is a two-place relation — where a region of spacetime is part of a region of spacetime *simpliciter* (i.e. not relative to anything). In contrast, the fundamental parthood relation for *material objects* is a three-place relation — where part-whole relations for material objects are *indexed to specific spacetime regions*. Thus, as McDaniel notes, ‘Objects and worlds not only do not overlap, but cannot overlap given that objects and worlds are unified by numerically distinct parthood relations.’⁴⁶ Now, in a similar manner to the part-whole relation for material objects, LRO takes the possession of properties to also be indexed to spatiotemporal regions — namely, a given object has a property only if there is a specific region of spacetime, such that the object is wholly present at that region, the region is part of the whole in question, and the object possesses that property relative to that region. Thus, given the notions of having a part at a world and a property at a world, an object cannot have a part or property *simpliciter*. Instead, an object *must* have a part of a property relative to a certain spatiotemporal region. Thus, as McDaniel writes, given LRO, ‘objects are literally wholly present at different possible worlds. And the properties that an object literally has at other possible worlds are literally the properties that this very same object at our world could have had.’⁴⁷ So, what we see here is that of the atness relation being able to be construed in a variety of different ways within the LRO framework.

For (d), the notion of ‘Absolute Actuality’ expresses the fact that actuality is a *primitive* (i.e. unanalysable) property that is *categorical* and *absolute*. In the pluriverse, there are many worlds, yet there is (at the least) only one world — *our* world — that possesses the special property of being actual.⁴⁸ Actual entities comprise a fundamental ontological category by sharing a primitive, non-qualitative property of ‘actuality’, such that it is in virtue of these entities belonging to that specific category — and possessing that specific property — that they have a different ontological status to *merely possible* entities.⁴⁹ In

46 McDaniel, “Realisms”, 306.

47 Ibid., 306.

48 Interestingly, Bricker “Lewis”, 65 is open to there being more than one actual world but proceeds to explicate the position detailed here within a ‘one actual world’ framework. We shall follow suit.

49 Bricker, “Concrete”.

other words, actual entities are distinguishable by them possessing the special property of actuality, which results in a certain region of the pluriverse — the ‘region of actuality’ — being ontologically distinct from another region — the ‘region of the merely possible’ — with the latter *not* forming a genuine ontological category.⁵⁰ Moreover, the ontological status bestowed upon these entities by the property of actuality is had by them in an *absolute* manner — in that, *contra* Lewis, actuality is not relative to the individual. Therefore, there is an ontological distinction of kind between the actual and the merely possible. Hence, as Bricker notes,⁵¹ there is thus ‘an absolute fact as to which among all the possible worlds has been actualized’. Yet, despite actuality being absolute, rather than relative, actuality is still a contingent notion, due to the fact that a distinction can be made between what is true *of* a world and what is true *at* a world — such that possibility and necessity are to be interpreted in terms of what is true *at* a world, rather than what is true *of* a world. A property is true of a world, as Bricker writes,⁵² ‘when the world has that property; a property is true at a world when the world represents itself as having that property’. In most cases, what is true at a world is what is true of that world; however, in the case of actuality, the two notions of ‘truth of’ and ‘truth at’ a world do not coincide, in that ‘is actual’ is *true at every world*, but is of *true of our world* and no other world. Thus, the absoluteness of actuality is secured by the latter affirmation — a certain world has a special ontological status that other merely possible worlds do not have — and the contingency of actuality is secured by the former affirmation — namely, which specific world is actual is contingent as any world *could* be actual.

Thus, there is a primitive fact about which things in the pluriverse are the actual entities. Yet, this specific fact cannot be grounded upon the fact that they have a quality that the others lack — that is, the actual world(s) have the property of absolute actuality not on the basis of it being qualitatively different from any other world.⁵³ Thus, the important question to be faced here is: on what does this primitive fact of actuality consist? One plausible answer forwarded by McDaniel is that of each of the merely possible worlds existing in a *fundamentally different way* than the actual world(s) — that is,

50 Bricker, “Actuality”.

51 Bricker, “Island”, 29.

52 Bricker, “Actuality”, 43.

53 Bricker, “Island”, 30.

there exist merely possible worlds and there exists an actual world(s) but the ways in which these entities exist differ — the way in which the merely possible worlds are *real* is not the same as the way in which actual objects are real.⁵⁴ More fully, according to McDaniel, we can have an answer to our question in assuming the veracity of *ontological pluralism* (hereafter, OP). OP is the thesis that there are multiple ways of being that are captured by ‘elite’ quantifiers that are at least as *natural* as the unrestricted quantifier. That is, within the pluralistic framework, there is an unrestricted quantifier (\exists) that ranges over everything that exists, *and* there are several elite quantifiers ($\exists^1, \dots, \exists^n$) — which is a quantifier that fails to range over everything that exists but is also not a semantically complex entity that consists of the unrestricted quantifier and a restricting predicate/operator — with the meaning of each elite quantifier being at least as *natural* as the meaning of the unrestricted quantifier — where an expression is more natural than another if the former carves reality at its joints to a greater extent than the latter.

Now, within the LRO framework, the infinite plurality of concrete worlds other than the actual world exists, yet, in now fleshing this out within an OP framework, we can take the way of being of the non-actual concrete possible worlds to exist in a *different way* than the actual world, in the sense that they enjoy *being-by-courtesy*. Being-by-courtesy, in McDaniel’s thought,⁵⁵ is a *degenerate* mode of being that is characterised in a negative manner as existence (in the sense of \exists) that is *not* expressed by any of the elite quantifiers ($\exists^1, \dots, \exists^n$). That is, entities — such as the merely possible worlds — that have being-by-courtesy are thus the entities that remain when the ranges of the elite quantifiers are subtracted from the range of the unrestricted quantifier. Now, if the elite quantifiers are conceived of as being perfectly natural — as they are — and thus carve nature at its joints by capturing fundamental ways of being, entities that are beings by courtesy would not be quantified over in any fundamental language — that is, a language that only employs elite quantifiers. Hence, beings-by-courtesy enjoy a degenerate way of being due to their way of being not being fundamental. In other words, entities that enjoy being-by-courtesy possess a lesser degree of reality than the entities that fall

54 Kris McDaniel, *The Fragmentation of Being* (Oxford Univ. Press).

55 *Ibid.*, 147.

within the range of some elite quantifier. Following McDaniel,⁵⁶ we can thus define the notion of degree of reality as such x is less real than y to degree n just in case (i) “ \exists^1 ” is the most natural quantifier that ranges over x , (ii) “ \exists^2 ” is the most natural quantifier that ranges over y , and (iii) “ \exists^2 ” is a more natural quantifier than “ \exists^1 ” to degree n . An entity’s degree of being is thus proportionate to the naturalness of its most natural mode of existence. In other words, if an entity fundamentally exists — it exists and is in the domain of an elite quantifier — then it has the highest degree of being. And if an entity degeneratively exists — it exists and is not in the domain of an elite quantifier — then exists to a less than maximal degree. Given this, it follows that infinite, merely possible worlds are less real than the actual world(s) — in that, the way of being of the merely possible worlds is being-by-courtesy — they enjoy a “diminished” kind of being. In short, the merely possible worlds and the actual world have different modes of being, with the former having an inferior mode of being to the latter.

Given all of this, we can thus see that LRO differs from LR in a number of ways. Importantly, however, with the LRO framework, one can also gain the theoretical advantages of reducing the modal to the non-modal had by LR — without, however, adopting counterpart theory — as *de re* modality can now be analysed within a new theoretical framework. That is, first, within the LRO framework, the notion of possibility is to be construed as such through the following biconditional:

- (9) (De Re-P²) x is possibly $F \leftrightarrow$ there is a world, w , such that x exists at w and is F at w ; x exists at w iff x is wholly present at a region R that is itself a part of w .

Second, the notion of necessity can also be construed as such through the following biconditional:

- (10) (De Re-N²) x is necessarily $F \leftrightarrow$ for every world, w , x itself exists at w and is F at w ; x exists at w iff x is wholly present at a region R that is itself a part of w .

According to LRO, *de re* modal claims about objects are thus not made true by facts about counterparts of the objects in question; rather, they are made

56 Ibid., 149–150.

true by facts about the objects themselves — by the features that these objects literally have at other worlds. Within the LRO framework, some worlds within the pluriverse are thus taken to have overlapping content — and thus Isolation being false — as there exist worlds w^1 and w^2 that have objects that literally exist at both worlds, with different parts and properties at those worlds. For heuristic purposes, we can thus illustrate the important modifications made to the structure and map of reality by LRO as follows (where ‘PI’ stands for ‘possible individual’, ‘ W^n ’ stands for a ‘particular world’, ‘Merely Possible boxes’ represent ‘merely possible category/individuals’, ‘Actual (Kind) box’ represents ‘the actual world category/individuals’ and ‘Concrete’ stands for ‘concrete domain’):

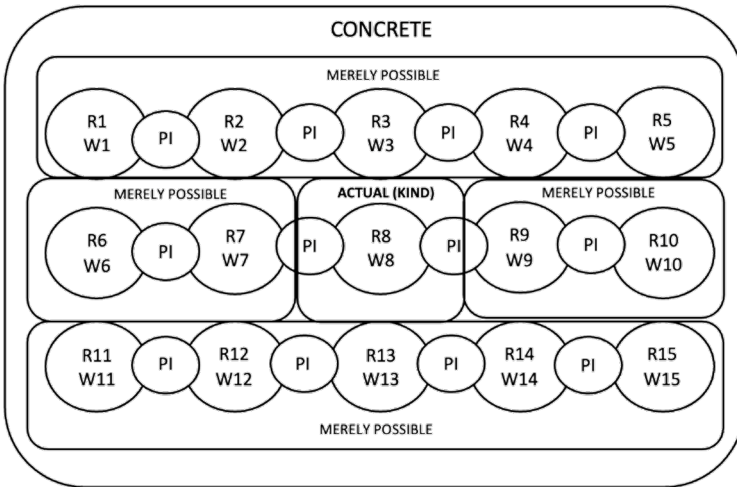


Figure 1.3 Leibnizian Realism with Overlap

Modal statements are thus now taken to be fully metaphysically explained by worlds and their occupants (i.e. objects), rather than that of counterparts that are taken to be inhabitants of solely one world. Therefore, within the LRO framework, objects are not world bound, and worlds are *not* isolated; instead, objects are (possibly) multi-located, and worlds can indeed overlap. We can now focus on applying the thesis of LRO to the task at hand.

III.2 Grounded Middle Knowledge: Phase-Two

In the previous phase of our formulation of the Modal Realist Solution, we identified the truthmakers of the CCFs that are part of God's middle knowledge with the infinite plurality of concrete possible worlds that make up the pluriverse. These entities could indeed serve as the truthmakers of these propositions as they necessarily exist, and thus, the latter is not true prior to the former coming about. Despite the success of this solution, however, the specific metaphysical framework that was employed in order to provide this solution to the GO commits one to the possibility of there being an infinite plurality of Gods (i.e. divine counterparts to the God of our world) and the potential for God to be robbed of his sovereign providential control of reality was a live issue as well (given that each of the worlds within the pluriverse is necessarily actual and thus God does not make a creative choice concerning which world he would like to be actualised). Employing a cost-benefit analysis of the Modal Realist Solution, it seems to be the case that the benefits (i.e. providing a solution to the GO) do not outweigh the costs (i.e. a plurality of Gods and a lack of sovereign providential control of reality). Hence, a remodelling (or rejection) of our solution appears to be needed. Now, this remodelling can be done by employing the metaphysical thesis of LRO, which will allow us to reaffirm the Modal Realist Solution. However, we can do this now in a manner that does not incur the costs of our previous version of the solution. We can proceed to do this as follows: as before, we, first, posit the fact of there existing an infinite plurality of concrete possible worlds within the pluriverse. However, second, unlike before, these possible worlds are to be identified as maximal regions of spacetime. That is, each of the worlds within the pluriverse is a collection of regions of spacetime that function as a 'container' for the individuals that occupy those regions. Hence, possible worlds can overlap in the sense that the self-same individual occupying a spacetime region in one possible world can also occupy another spacetime region in another possible world. Thus, individuals can enjoy multiple location. Third, amongst the infinite plurality of possible worlds, there is one specific world that bears the primitive absolute property of actuality. All of the merely possible worlds exist within the pluriverse with a different ontological status from the actual world. That is, they are beings-by-courtesy and thus exist with a lesser degree of being than the actual world, which secures the ontological distinction between the actual world and the other merely

possible worlds that populate the pluriverse. Actuality is thus absolute and a unique characteristic of one possible world within the pluriverse.

Given this metaphysical picture, we can now focus, first, on dealing with the PP by locating God within the pluriverse. In the LRO framework, one can conceive of God as existing within the possible individuals category: God exists within the domain of concrete entities — where, within the pluriverse, this domain would include the entities that exist *at* a world. A world, as previously noted, is a maximally, spatiotemporally related region of spacetime. God, as with other concrete entities, exists as an occupant of a spatiotemporal region (rather than as a part of that region). One can thus take God to be an entity that exists at every world within the pluriverse. That is, God is wholly present at specific spatiotemporal regions of all of the worlds that make up the totality of reality.⁵⁷ More precisely, God exists *at* a world by there being a certain region in which he is *wholly present* at that region, and that region is a part of that world. It will be helpful to now illustrate this option as follows: (where ‘G’ stands for ‘God’, ‘Rⁿ’ stands for ‘region of spacetime’, ‘Wⁿ’ stands for a ‘particular world’, ‘Merely Possible boxes’ represent ‘the merely possible category/individuals’, ‘Actual (Kind) box’ represents ‘the actual world category/individuals’, ‘Concrete’ stands for ‘concrete domain’ the ‘black arrows’ representing ‘grounding relations’ and the ‘red arrow’ representing ‘God’s creative/actualising action’):

57 This is not to say that God cannot also (somehow) be conceived of as a ‘timeless’ being as well — as was shown in my previous work on this topic where I took God to have two modes of being: a transcendent mode of being where he is timeless (simple and immutable) and an immanent mode of being where he is temporal (complex and mutable).

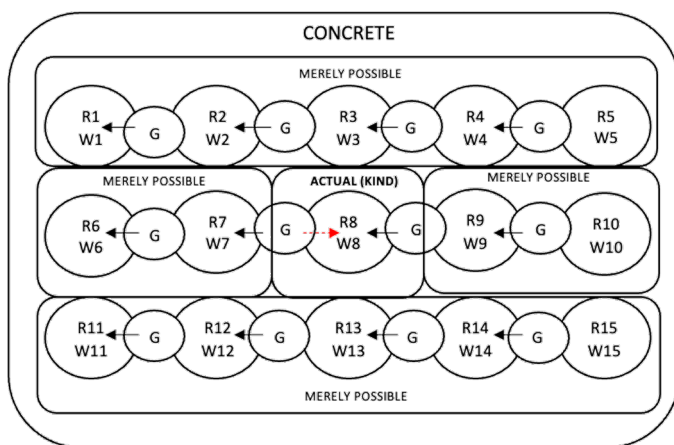


Figure 1.4 God's Pluriverse Location (ii)

In locating God within the pluriverse, one can thus take God to be a possible individual and thus exist, and be active from, specific regions within each world. That is, from this perspective, God is multiply located in different regions of spacetime, and from these regions, God grounds each and every world that he is located at — which is thus that of every world within the pluriverse.⁵⁸ Thus, due to the fact that the concrete possible worlds within the pluriverse can overlap in this way, one does not have to postulate the existence of any duplicates of God (i.e. divine counterparts). Hence, there is no PP within *this* specific modal realist picture framework. We can now turn our attention to dealing with the PI and PA as well.

As noted throughout, God is taken to have a certain structure to his knowledge that centres around three logical moments: natural knowledge, middle knowledge and free knowledge. In the previous iteration of the Modal Realist Solution, one was not able to affirm the reality of this structure given the fact that God was not taken to perform any free creative action concerning the specific feasible world that he wanted to actualise. Within the LRO framework, however, this creative activity can indeed be maintained, and we can understand how as follows: in the first moment, natural knowledge, God knows from the infinite set of concrete possible worlds (i.e. maximal

58 More on this grounding action of God below.

spacetime regions) what each of the occupants of those worlds *could* do in each of the circumstances that they find themselves in. Then, in the second moment, middle knowledge, there is an infinite subset of feasible concrete worlds where God knows what each of these occupants of those worlds *would* do in the circumstances that they find themselves in. Importantly, however, we can reaffirm the fact that the inapplicability of the GO against the current proposal, as each of the entities that are present within God's natural and middle knowledge (i.e. the concrete possible and feasible worlds) necessarily exist. Though what we can now say, in order to further secure God's sovereignty, these entities are not independently existing entities but are one's that are necessarily 'grounded' by God — where grounding is an asymmetric, necessitating dependence relation that links the more fundamental entities to the less fundamental entities.⁵⁹ That is, God grounds each of the regions of spacetime and each of the occupants of these regions. However, this does not mean that the entities exist on the basis of God's free will decision; rather, these entities simply have God as their most fundamental source through him necessarily grounding them in being. Therefore, as with the PP, we seem not to have any basis for raising the PI against the current proposal. Hence, we can proceed to re-state our solution to GO, in a re-construed manner, as such (where, again, ' $c \rightarrow z$ ' represents a 'Counterfactual of Creaturely Freedom' and x stands for 'concrete feasible worlds'):

- (11) (Modal Realist Solution²) There are truthmakers: the concrete possible worlds (i.e. maximal spatiotemporal regions) and multi-locatable individuals, that cause (or are sufficient for) the truth of Counterfactuals of Creaturely Freedom.

$$[\exists x [x \rightarrow (c \rightarrow z)]]$$

Our solution to the GO stays the same — with a slight modification made to the nature of the concrete worlds and occupants of those worlds. However, in maintaining this within the LRO framework, we are now able to also continue to maintain God's creative activity and free knowledge — which was lost in the solution provided by the LR framework. That is, as before, inter-

59 For a detailed unpacking of the nature of grounding, see Jonathan Schaffer, "Grounding in the image of causation." *Philosophical Studies* 173 (2016): 49–100.

vening between God's natural knowledge and free knowledge is his creative activity, where God freely chooses one of the feasible worlds to actualise. Yet, the manner in which this is now to be understood within the LRO framework is as that of God freely choosing to actualise a certain feasible possible world by conferring a special property on an *already existing* merely possible world. More specifically, God is necessarily related to the merely possible entities by *grounding* their existence. Nonetheless, despite the necessary existence of the merely possible worlds, God has a counterfactual choice in the form of God's *actualisation* of a merely possible world into the actual world. That is, God freely chose to *transform* a particular world into the actual world by bestowing on it a special ontological status and making it into a *different kind* from the merely possible entities. Thus, (logically) prior to this actualisation, God existed alongside the merely possible worlds, yet there were no entities that *actually* existed. God then surveyed all of the concrete feasible worlds in the pluriverse and elected to actualise a specific world. Once God had elected and actualised a specific world, a new *type* of entity came into existence — an actual world, which has a fundamental way of being that is expressed by a specific elite quantifier — and thus, it now exists in a different way than the merely possible worlds that were not actualised by God. The merely possible worlds that were not chosen to be actualised by God are beings-by-courtesy and thus enjoy a *degenerate way of being* due to these entities being the entities that remain when the ranges of the elite quantifiers are subtracted — by God's creative activity — from the range of the unrestricted quantifier. The merely possible worlds now, in this logical moment, possess a lesser degree of reality — where a possible world's degree of being is proportionate to the naturalness of its most natural mode of existence. Hence, the merely possible worlds degeneratively exist — they exist and are not in the domain of an elite quantifier — and thus exist to a less than maximal degree. Whereas the possible world, which was specifically chosen to be actualised by God, now has a fundamental way of being — it exists and is in the domain of an elite quantifier (e.g. \exists^1) — and thus has the highest degree of being. In short, due to the creative activity of God, each of the infinite plurality of merely possible worlds thus continue to exist as a being-by-courtesy that has a lesser degree of reality than the actual world by it not sharing in a fundamental way of being. There is thus a contingency associated with created reality — a contingency of actuality, rather than existence — as plausibly there will be a near-infinite

variety of candidate worlds within the pluriverse, whose value exceeds some threshold value τ , that God would have good reason to actualise. The actualisation of a *specific* world is *not* necessary; rather, God expresses his free will in actualising one of the merely possible worlds. Hence, God's freedom to create is thus not that of the creating of a new world — as each of the merely possible worlds necessarily exists — but is instead the creation of a new *kind* of world — a change in kind of a world from being a merely possible world (with a lesser degree of reality and no fundamental way of being) to being the actual world (with a greater degree of reality and a fundamental way of being) — with the specific world that experiences this kind-change being freely chosen by God. We thus are not presented with the PA as God is indeed able to perform a free, creative action by actualising one of the specific worlds within the pluriverse. And by this actualisation of this specific world, God will have free knowledge in that he perfectly knows what will happen in the actual world. We can thus provide our final re-construal of the logical structure of God's knowledge as such:

Logical Structure	1. Natural Knowledge	2. Middle Knowledge	Creative Activity (Decision)	3. Free Knowledge
Truths	Necessary and Independent of God's free will Everything that 'could' happen.	Contingent and Independent of God's free will Everything that 'would' happen.	/	Contingent and Dependent on God's free will Everything that 'will' happen.
Knowledge	God's essential knowledge of all concrete possible worlds (i.e. maximal spacetime regions with multi-locatable occupiers). The content of this includes all logical necessities and an infinite range of possible combinations of individuals.	God's essential knowledge of all feasible concrete worlds (i.e. maximal spacetime regions with multi-locatable occupiers). The content of this includes knowledge concerning what any free individual would do under any possible set of circumstances.	/	God's knowledge of the actual world. The content of this knowledge is not essential to God.

Table 1.4 Logical Structure of God's Knowledge (iv)

Thus, as before, God is able to sovereignly control all things — by him determining by his sovereign free choice what will actually be the case — yet there is (again) a means for one to maintain the genuine freedom of the individuals that exist in those worlds — as the concrete worlds and the individuals and circumstances that are included within them exist *pre-volitionally* — that is, independent of the free will of God. The doctrine of middle Knowledge — as conceived of within a modal realist framework — is thus a highly fruitful notion that secures divine providence and creaturely free will — without, however, one having to face up to the GO as well.

IV. CONCLUSION

In conclusion, the central focus of this article was to provide a solution to the Grounding Objection. This solution—termed the Modal Realist Solution—was provided by re-situating the central tenets of the doctrine of middle knowledge within a modal realist framework—namely, that of David Lewis version of modal realism. Doing so, however, presented its own problems (i.e. the Problems of Plurality, Independence and Actuality) that needed to be dealt with in order for the solution to be viable. These problems were dealt with by further refining the problematic areas of Lewis’ modal metaphysics by combining the insights of Kris McDaniel and Philip Bricker, which provided us with a new modal realist framework (i.e. Leibnizian Realism with Overlap) to re-situate the doctrine of middle knowledge in a manner, however, that did not commit us to the problems raised by our previous attempt. Given this, the doctrine of middle knowledge, as reconceived within a (Concretist) modal realist framework, is free of the Grounding Objection and can thus continue to serve as a viable means of reconciling God’s providential control of all of reality with that of genuine (libertarian) creaturely freedom.

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