



## From facts to God: An onto-cosmological argument

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... it is one of the worthiest of inquiries to see how far our reason can go in the knowledge of God. – Immanuel Kant<sup>1</sup>

### Introduction

It may well be that one cannot *prove* the existence of God: One will be hard-pressed to produce a theistic argument with power sufficient to compel acceptance from everyone who understands it. But then no argument for any broadly philosophical thesis has this sort of power. If one is unprejudiced, however, one will have to admit that there are arguments for the existence of God that satisfy the following conditions: (i) they are valid in point of logical form; (ii) they fall afoul of no informal fallacy such as *petitio principii*; and (iii) they feature premises that it is reasonable to accept given the present state of scientific knowledge.<sup>2</sup> I aim to present one such argument in the ensuing pages. Reduced to the bare bones of Modus Ponens, it runs: It is possible that facts exist; if it is possible that facts exist, then God exists; therefore, God exists. This argument is neither ontological nor cosmological, but ‘onto-cosmological.’ Let me explain.

According to Kant, speculative rational theology is either onto-theology or cosmo-theology or physico-theology.<sup>3</sup> The first argues to God from the concept of God, the second from the existence of a world in general, and the third from the constitution of the present world. Kant of course held that none of these ways is viable. But there is a fourth way, that of ‘onto-cosmology,’ to give it a name. An argument of this sort proceeds ‘ontologically’ (thus analytically and *a priori*) from certain *necessary* features of the world. Thus it argues from the world like the cosmological argument, but does so by sheer analysis of certain of its *necessary* features, and hence without reliance on any such synthetic principle as that of sufficient reason (PSR).

If an onto-cosmological argument can be mounted, it will not only have the advantage of avoiding PSR,<sup>4</sup> but will also provide a way of circumventing

a powerful objection to cosmological arguments. Such arguments must take us from the world's contingent existence to a ground of its existence in an *unconditionally* necessary being. For only an unconditionally or absolutely necessary being has any chance of being identified with God.<sup>5</sup> But how can any cosmological argument negotiate the passage from 'Necessarily, if U exists, then G exists' to 'If U exists, then necessarily G exists' where 'U' denotes the universe and 'G' its ground? This fails as an immediate inference; to think otherwise is to confuse the *necessitas consequentiae* with the *necessitas consequentiis*. How then can a cosmological argument prove that G is necessary *in itself* (unconditionally necessary) and not merely necessary *for the world* (conditionally necessary)? Obviously, X could be necessary for Y without being necessary in itself.<sup>6</sup>

Here is one aspect of the problem. Consider two metaphysically possible worlds: W1 contains contingent beings; W2 contains no such beings. Suppose it can be shown that the contingent denizens of W1 depend for their existence on an independent being G. How do we know that G exists in W2? If it does not, then G, though causally independent of the members of W1, is metaphysically contingent (since it does not exist in *all* possible worlds) and so not a candidate for deity. The problem arises because there are possible worlds in which nothing contingent exists. In all such worlds, there are no beings whose existence would entail the existence of an independent being.

But the possibility P of there being some contingent beings or other presumably exists in every possible world.<sup>7</sup> It is characteristic of the S5 system of modal logic that what is necessary and possible does not vary from world to world. Thus from 'Possibly *q*' we may infer 'Necessarily possibly *q*.' So from 'Possibly, there are contingent beings' we may infer 'Necessarily possibly there are contingent beings.' This implies that the possibility P of there being some contingent beings or other is not contingent on anything, and so exists in every possible world. Thus an argument that argued from P to the existence of a condition or ground of P would avoid the present problem. Since P exists in every world, a ground of P exists in every world. But how do we know that the ground of P in W1 is the same as the ground of P in W2? We know this because P is the same across all worlds.

An onto-cosmological argument, then, has the resources to negotiate the passage from 'Necessarily, if U, then G' to 'If U, then necessarily G.' Simply substitute 'P' for 'U.' If P exists in every possible world, and if the existence of P entails the existence of G, then G exists in every possible world.<sup>8</sup> In the argument that follows I will not be invoking the possibility of contingent beings in general, but the possibility of facts, which are a species of contingent being.

The argument divides into two main parts. The first (Sections 1 and 2) steers toward what I call an ‘external unifier.’ The second part aims to show that this external unifier has sufficiently many of the divine attributes to warrant our calling it ‘God.’

### 1. It is possible that facts exist

It is clear that one may validly argue *ab esse ad posse*, from existence to possibility. Thus to make a case for facts is *eo ipso* to make a case for their possibility. Now no one can *prove* that there are facts; but one can make a reasonable case for them, which is all that will be attempted in this section. What I mean by ‘fact’ will emerge as we proceed.

We begin the argument for facts with the ‘truth-maker intuition’: true contingent indicative sentences and the thoughts they express require extralinguistic and extramental truth-makers. The idea is that there must be entities in the world to serve as the ontological grounds of contingent truths, either directly or indirectly. Presumably, a truth of the form *Something is F* is made true indirectly via a sentence or proposition<sup>9</sup> of the form *a is F*. But sentences of the latter form, if true, are made true by direct contact with their ontological grounds. For if a contingent indicative atomic sentence is actually true, this cannot be a ‘brute fact’;<sup>10</sup> it demands an explanation, and presumably one that must invoke some piece of extralinguistic and extramental reality. ‘I am writing’ is true *because* I am writing, where ‘because’ picks out the asymmetrical relation of truth-making, which is not to be confused with causing. This strikes me as a non-negotiable point far worthier of credence than the objections that can be brought against truth-making and truth-makers. “For it is not because we truly hold you to be white that you are white; but it is because you are white that we who hold this hold the truth.”<sup>11</sup>

This truth-maker intuition includes the anti-Meinongian intuition that ‘truth follows being,’ that every true sentence is about one or more existent items whose existence is logically prior to whatever truths there might be about them. Thus if ‘*a is F*’ is true, then there exists an *x* such that *x = a*. But one could accept this ‘truth follows being’ intuition without accepting the truth-maker intuition. For the latter takes the further step of insisting that if ‘*a is F*’ is true, then there exists something that ontologically grounds or accounts for the *truth* of this sentence, and not merely its reference to something language-independently existent. This ontological ground cannot be *a* by itself since it is clear that the mere existence of *a*, though a necessary condition of there being truths about *a*, does not make true every true sentence about *a*. Consider two logically independent sentences such as ‘Tim is seated’ and ‘Tim is writing.’ We cannot explain why these sentences, or the thoughts

they express, are true by invoking the mere existence of Tim, for his existence, though necessary for their truth, is not sufficient. Tim's existence is consistent with the truth of one sentence and the falsity of the other, or with the falsity of both. A truth-maker must somehow 'constrain' (logically determine) the truth of its corresponding truth-bearer; this suggests that the existence of the truth-maker must entail the truth of the truth-bearer.<sup>12</sup> Since neither Tim nor Tim's existence entails the truth of true contingent sentences about him,<sup>13</sup> neither Tim nor Tim's existence can serve as a truth-maker.<sup>14</sup>

Nor can the truth-maker of '*a* is *F*' be *F*-ness alone – this is obvious – or the pair of *a* and *F*-ness. For there are possible worlds in which both *a* and *F*-ness exist, but '*a* is *F*' is false. What is needed to do the truth-making job, apparently, is something with a structure isomorphic to the sense-structure of the corresponding sentence. What we need is an entity with a proposition-like structure whose existence or obtaining determines the truth of the corresponding sentence.<sup>15</sup> Thus it is natural to say that the truth-maker of '*a* is *F*' is the fact or concrete<sup>16</sup> state of affairs, *a's being F*.<sup>17</sup> The sentence is contingently true because in extralinguistic reality *a* exists, *F*-ness exists, and the first contingently instantiates the second thereby forming a state of affairs.<sup>18</sup>

## 2. If it is possible that facts exist, then an external unifier necessarily exists

Given that there are truth-grounding facts, a question arises as to their precise nature. A fact such as *a's being F* is a complex composed of its constituents, in this case *a* and *F*-ness. But it is clear that a fact is more than its constituents since the existence of the constituents does not entail<sup>19</sup> the existence of the fact. If *b* and *F*-ness each exists, it follows (with the aid of relatively uncontroversial principles<sup>20</sup>) that various supervenient entities exist, among them the mereological sum *b* + *F*-ness, as well as the set {*b*, *F*-ness}; but it does not follow that *b's being F* exists. For a fact to exist (obtain) it is not sufficient that its constituents exist; it is also necessary that they be unified or connected. Now how are we to understand this connectedness? There are two extant approaches. The one, call it 'reductionist,' attempts to account for the peculiar unity of a fact's 'primary' constituents – the *a* and *F*-ness in our simple monadic example – by invoking a further constituent, a 'secondary' constituent, whose job is to 'tie together' the others. This might be a relation of exemplification, or else some sort of nonrelational tie or nexus. Whatever it is, it is a further constituent of the fact, and thus internal to it. This approach is aptly called 'reductionist' because according to it a fact is wholly analyzable and thus reduces without remainder to its primary and secondary constituents.

So although on any reasonable theory a fact does not supervene upon its primary constituents, on the reductionist theory it does supervene upon its primary and secondary constituents.

The other approach, call it 'nonreductionist,' is essentially a reaction to the difficulties that arise from thinking of the unifier of a fact's primary constituents as a further constituent. On the nonreductionist approach, a fact is not wholly analyzable and is thus an irreducible entity over and above its constituents. Armstrong opts for this approach when he writes that "States of affairs [facts] hold their constituents together in a non-mereological form of composition . . ." <sup>21</sup> Thus there is no need for a special unifying constituent, whether it be a relation of exemplification or a nonrelational tie. The fact itself does the unifying job.

These then are the two extant approaches to the question of the unity of a fact's constituents. On the one, the unifier of a fact's constituents is a further constituent internal to it; on the other, the unifier is the fact itself. But I will show that both are incoherent. To anticipate, the reductionist approach is incoherent because, for essentially Bradleyan reasons, the unity of a fact's constituents cannot be established by any further constituent, no matter what marvelous properties it has. The nonreductionist approach is incoherent because facts, conceived as irreducible to their constituents (whether primary or secondary), are contradictory structures: it will emerge that a fact so conceived is a whole of parts that is not a whole of parts.

Now if both extant approaches to the nature of facts are incoherent, it does not follow that there is no coherent approach and that facts should be banished from our ontology. For one thing, the truth-maker argument gives us excellent reason to believe that facts exist; but about anything that exists it must be possible to work out a coherent theory. To see how there could be a third approach, note that both extant approaches assume that facts are self-contained entities or as I will also say, 'independent reals.' By this I mean that on both extant approaches facts do not depend on anything external to them for their existence as facts. On the reductionist conception, the unity of a fact's constituents (and thus the existence of the fact) is due to an internal unifying constituent. On the nonreductionist conception, it is the fact itself that holds its constituents together. In neither case, then, is the existence of the fact dependent on anything external to the fact. But there is a third theoretical possibility (and this is the only other possibility), namely, that facts have an external unifier, one distinct from the fact and its constituents. Supposing this to be the case, facts would depend on this external unifier for their existence and thus would not be independent reals. They would not be self-existent, but dependent on another for their existence as facts. As so dependent, facts are

*ab alio*; so I am tempted to call this view ‘abalism.’ Resisting temptation, I’ll call it ‘dependentism’ instead.

The first phase in the overall argument from facts to God proceeds by establishing the existence of the external unifier. This subargument deploys itself as follows:

1. Facts exist; hence it is only their nature that is in question.
2. Reductionism is false: A fact cannot be reduced to its constituents.
3. Nonreductionism is false: A fact both irreducible to its constituents and independently real is a contradictory structure and hence necessarily nonexistent.

Therefore

4. Dependentism is true: Facts are dependent for their existence (i.e., for the unity of their constituents) on an external unifier, one distinct from the fact and its constituents.

Premise (1) was supported in section 1 above; premises (2) and (3) are about to receive support. (4) follows from (1)–(3) on the assumption that there are only three possible conceptions of states of affairs, the reductionist, the nonreductionist and the dependentist.<sup>22</sup>

### 2.1. *Ad(2): Reductionism is false*

On reductionism, a fact, being a complex, reduces to its constituents. But as noted, a fact is more than its primary constituents in that it is their peculiar fact-making unity or togetherness. This is a datum any theory must explain; characteristic of reductionism is the attempt to explain it by postulating a special unifying constituent. This might be the relation of exemplification, call it ‘EX.’ *a’s being F* would then have as constituents, *a*, F-ness and EX. But if there was a problem about how the fact’s two primary constituents can form a unity, there will also be a problem about how these three constituents can form a unity. There is after all a difference between *a’s being F* and the sum, *a* + F-ness + EX. Although the existence of the fact entails the existence of the sum, the existence of the sum does not entail the existence of the fact. This of course is the animating core of F. H. Bradley’s famous regress argument against external relations.<sup>23</sup> An external relation is one whose holding between two or more objects is not grounded in the intrinsic properties of those objects in the way in which *the same color as* relation (which is internal) *is* grounded in the intrinsic properties of two red balls, say. Now it is clear that EX is an external relation: in the contingent fact, *a’s being F*, there is nothing in the nature of *a* to require that it exemplify F-ness, and nothing in the nature of F-ness to require that it be exemplified by *a*. And of course there is nothing in the nature of EX itself to require that it connect any two fact-appropriate constituents that it does connect. So EX being an external relation, it appears

that further relations – which cannot fail to be equally external – must be brought in to relate EX to its relata in order to secure the unity of the fact's constituents. But then a regress ensues which is both infinite and vicious. For no matter how many further constituents are added, there will always remain a logical gap, a failure of entailment, between the sum of those constituents and the fact. For example, if triadic EX\* is introduced to tie together *a*, EX and F-ness, the sum of these four items still does not add up to the fact. And so on for tetradic EX\*\*, etc.

It might be thought that this problem can be solved by replacing EX with a nonrelational tie, call it NEX (for 'nexus' with a sidelong glance at Gustav Bergmann). "A nexus does not need a further entity to tie it to what it ties . . ." <sup>24</sup> Well, suppose exemplification is a nonrelational tie (suppose this is not a *contradictio in adjecto*). Its introduction does absolutely nothing to solve the problem. This is because the Bradleyan problem is fundamentally one of securing unity and not one of avoiding a regress. For there is surely a difference between *a's being F* and the sum, *a + NEX + F-ness*. The fact entails the sum, but not vice versa. NEX may well connect its terms directly without igniting a regress – *if it does connect them*. But does it connect them? How is this so much as possible? <sup>25</sup>

The problem remains because NEX like EX is external to its terms: there is nothing in the nature of NEX to require that it connect any two particular fact-appropriate constituents, although it may well be that NEX cannot exist without connecting some constituents or other. Since it is the externality of NEX that causes trouble, its not being a relation helps not a jot. What is needed is not a nonrelational tie, but a *nonexternal* tie. But if the constituents of a fact are tied nonexternally (internally) to each other, that amounts to saying that the existence of the constituents entails the existence of the fact (analogously as the existence of two red balls entails the existence of the relational fact of their being the same color as each other). This however would destroy the contingency of facts: a fact is contingent because its constituents are only contingently connected. To preserve the contingency of the connection, a tie must be external to its terms; but then we are stuck with the unity problem. It is clear that nonrelational ties avail nothing. It remains unintelligible how NEX succeeds in actually tying together the primary constituents into a fact.

At this juncture one may be tempted to make a move reminiscent of Frege. Although Frege had no room in his mature ontology for facts, he held that concepts or properties are essentially 'unsaturated' or gappy or incomplete. <sup>26</sup> Exploiting this idea, suppose we replace both EX and NEX with a gap or slot in the property constituent. Let '\_\_\_F' denote a gappy property. We might be then tempted to think that *a* and \_\_\_F fit together like plug and socket without

the need of any binding agent or connector. And if there is no connector, then there will of course be no need for any further connectors to connect the original connector to what it connects. But again, this Fregean maneuver does nothing to solve Bradley's problem. One need only ask: what is the difference between *a's being F* and the sum,  $a + \_F$ ? The fact entails the sum, but not vice versa. *a* and  $\_F$  can each exist without the first saturating the second. (Thus *a* might exist in the fact *Ga* while  $\_F$  exists in the fact *Fb*: we need not assume that there are uninstantiated properties.) So something more is needed to insure the actual unity of the constituents. Granted, *if* particular and gappy property form a fact-unity, they form it directly without the assistance of any intermediary; but the precise question is *how* they can form such a unity if all there is to the fact is *a* and  $\_F$ . The unity of the two constituents is not nothing, and the unity is not entailed by the mere existence of the constituents; so there is need for something to unify the constituents. As I said a couple of paragraphs back, the Bradley problem is essentially a problem about unity, not about regress-avoidance. If a vicious regress is sired by the introduction of a *tertium quid* to bind together the constituents, then a Fregean quashing of the *quid* will eliminate the regress; but you will not thereby solve the unity problem. Thus the Fregean shuffle mislocates (dislocates?) the bone of contention.

Of course, I am assuming that properties, gappy or not, are (immanent) universals. If they are themselves particulars, then perhaps there is no unity problem. For then it would be plausible to say that if Socrates and his (unrepeatable) whiteness exist, then *Socrates' being white* 'automatically' exists. Now whether properties are universals or particulars is a vexed and much controverted question; I will simply asseverate that it is reasonable to hold them to be universals. This goes together with the view that truth-makers are facts, not things. Bear in mind that in my main argument, and in its subarguments, I am only trying to make a reasonable case; I doubt one could do more.

## 2.2. *Ad(3): Nonreductionism is false*

The lesson from Bradley is that a fact cannot be viewed coherently as reducing to its (primary and secondary) constituents. A fact, as the unity of its constituents, is always more than them. This motivates the nonreductionist approach, according to which a fact is irreducible to its constituents. But a fact both irreducible to its constituents and independently real is a contradictory structure and hence necessarily nonexistent. Or at least that is what I hope to show.

To put it bluntly and schematically, a fact taken by itself as an independent real both is and is not a whole of parts. A fact *is* a whole of parts in that there



is nothing 'in' it and nothing 'to' it but its parts. Analysis of  $aRb$  can yield nothing beyond  $a$ ,  $R$ , and  $b$ . A fact is *not* a whole of parts in that the existence of the parts does not entail the existence of the whole. It does no good to say, with Armstrong, that facts are special unmereological wholes, for translated into plain English, that amounts to 'un-wholly wholes.' Unmereological composition, as David Lewis has observed, is a contradiction in terms.<sup>27</sup> Thus we get a contradiction: A fact both is and is not a whole of parts.

Some contradictions are of course merely apparent and are dissolved by distinguishing between times, places, or respects. It is only apparently contradictory to say of a poker that it is both hot and cold (= non-hot) if it is hot and cold at opposite ends. But our contradiction looks to be genuine since both limbs are self-evident *when facts are taken to be independent reals*. It is self-evident that a fact, being a complex, is composed of its constituents and is thus a whole of parts. But it is also self-evident that a fact is more than its constituents – being their unity – and so cannot be (identically) a whole of parts. Assuming that there are no true contradictions, the existence of our contradiction demands that we either deny the existence of facts altogether, thus setting aside the truth-maker argument, or look beyond facts to something that can remove the contradiction.

But before launching into the onto-cosmological stratosphere, I want to nail down the present point very carefully. So let us consider some further reasons why facts on the nonreductionist conception are contradictory structures when taken to be independent reals.

1. Recall Armstrong's claim that "States of affairs hold their constituents together in a nonmereological form of composition . . ."<sup>28</sup> This is an understandable reaction to the discredited view that something internal to the state of affairs unifies its constituents. If the unifier cannot be internal, then perhaps the unifier is the state of affairs itself. But taken literally, and perhaps uncharitably, Armstrong's claim sounds absurd. A state of affairs is logically posterior to its constituents in that it is built up out of them. How then can it hold its constituents together? To do that job it would have to be logically prior to them, or at least not logically posterior. Surely what is logically posterior cannot also be logically prior or logically coeval. If we distinguish among (i) unifier (operator), (ii) primary constituents (operand), and (iii) product (state of affairs), then it is clear that a state of affairs cannot be the unifier of its own constituents.

But perhaps this *positive* interpretation of Armstrong's dictum is uncharitable. Perhaps he intends it in a *privative* sense similar to the theist, who when claiming that God is *causa sui*, intends not that God causes himself (which is absurd) but that God is not caused by another. Taken privatively, Armstrong's dictum says that nothing holds the constituents of a state of affairs together:

they are just together in a state of affairs as a matter of brute fact. Thus all we have are the primary constituents and the state of affairs, but no unifier, nothing that ties the former into the latter.

2. But if the constituents can be together as a matter of brute fact, then it is not clear why we need states of affairs in the first place. Suppose '*a* is *F*' is true. The Ostrich Realist will admit that this commits us ontologically to *a* and *F*-ness, but deny that it commits us to the state of affairs, *a*'s being *F*.<sup>29</sup> If we press the Ostrich to explain the difference between the situation in which *a* and *F*-ness exist but *a* does not instantiate *F*-ness and the situation in which *a* and *F*-ness exist but *a* does instantiate *F*-ness, he will say that the difference has no explanation, that it is a brute fact. If this is unsatisfactory, as I think it is, then why isn't it also unsatisfactory to say that the constituents in a state of affairs are united as a matter of brute fact? Turning the question around, if it is satisfactory to say that the constituents in a state of affairs are united as a matter of brute fact, then why isn't it also satisfactory to say that the two situations just mentioned differ as a matter of brute fact, or (equivalently) that the truth of '*a* is *F*' is a brute fact needing no explanation in terms of a truth-maker? If you are going to reach for a brute fact, why not do it sooner rather than later? Why introduce a further sort of entity, states of affairs, if you will be forced to admit that the togetherness of their constituents can only be a brute fact? You would save yourself trouble by allowing that a particular can instantiate a universal without forming with it a state of affairs.

The point is that Armstrong's conception of a state of affairs, taken charitably and thus privatively, is unstable. If a contingent truth is explained by the existence of a truth-making state of affairs, then what explains the existence of the state of affairs, i.e., the unity of its constituents? A state of affairs cannot explain its own existence, i.e., the unity of its own constituents, for the reason given in #1 above. But the unity of the constituents of a state of affairs cannot be a brute fact either, especially given that unmereological composition is a contradiction in terms. Thus if there are states of affairs at all, they must have an external unifier.

3. Exploring this further, what is the difference between the sum, *a* + *F*-ness, and the fact, *a*'s being *F*? It won't do to say that the first is a sum and the second a fact, for we already know that. What we don't know is what makes them different. On the nonreductionist approach, the sum and the fact are distinct, but nothing makes them distinct. I am not assuming that there cannot be entities that are just numerically distinct without anything that makes them distinct: Armstrong's thin particulars fit this description, and I will assume that they are unproblematic. My point is that it is difficult to see how two *complexes* can be distinct without there being anything internal or external to them that makes them distinct. Every other type of complex of

our acquaintance is such that there is no difference without either a difference in constituent or a difference grounded in an external entity; so why should facts be any different? Two sets, for example, cannot differ unless they differ in an element; two sums unless they differ in a member. Consider a bicycle and (the sum of) its disassembled parts. Are these two just distinct without anything that makes them distinct? Obviously not. The distinctness is due to an external entity, an assembler. How then can a fact and the corresponding sum of its constituents just differ?

One might bite the bullet here and say that this is just the way facts are. In support of this one might adduce apparent cases in which two facts differ without differing in a constituent. Where  $R$  is a non-symmetrical relation, *loves* for example,  $aRb$  and  $bRa$ , which are clearly different facts, seem to differ without differing in a constituent. If there are complexes that differ without differing in a constituent, perhaps the difference between a fact and its corresponding sum is but another instance of this. Indeed, in one place Armstrong argues for states of affairs from the premise that there are complexes that differ without differing in a constituent.<sup>30</sup> Since  $aRb$  and  $bRa$  ( $R$  either non-symmetrical or asymmetrical) are different states of affairs that share all constituents, they differ only by being different states of affairs. "Hence we require states of affairs in our ontology."<sup>31</sup>

This is not a satisfactory argument for states of affairs. For one thing, it is question-begging.<sup>32</sup> And as Armstrong later came to realize under the influence of Reinhardt Grossmann, it is not at all clear that our two relational facts do not differ in a constituent.<sup>33</sup> Arguably, . . .  $R$  – is different from  $-R$  . . . . Non-symmetrical and asymmetrical relations have a 'direction' so that, e.g.,  $x$ 's loving  $y$  is distinct from  $y$ 's loving  $x$ . These are two different relations. Thus there is something internal to the two states of affairs that distinguishes them; they do not just differ as states of affairs.

With the concession to Grossmann, Armstrong loses an independent reason for accepting states of affairs as unmereological compositions. (But a bad reason is one well lost.) He is thrown back upon the truth-maker argument as the sole support for nonreductionist (nonsupervenient) states of affairs. It is therefore puzzling when he writes that "If we have to choose between the (intuitively quite attractive) 'Nominalist' principle ['a system is nominalistic . . . if no two entities are generated from exactly the same atoms.'] and the truthmaker argument that leads us toward states of affairs, then my judgment is that the truthmaker principle is by far the more attractive."<sup>34</sup> Well, they are *both* attractive, and there is no need to choose between them. To reject the notion that facts supervene upon their constituents it is not necessary to hold that facts can differ without differing in a constituent; it is only necessary to grasp Bradley's point that a fact is more than its constituents. It is consistent

to maintain both that (i) facts are more than their constituents and (ii) facts cannot differ without differing in a constituent. Indeed, I claim that both (i) and (ii) are true. How they can both be true is a question to engage us shortly.

This third consideration may be summed up as follows. It is unintelligible to suppose that two distinct *complexes* just differ as a matter of brute fact. A fact and the sum of its constituents are distinct complexes; hence there is need for a ground of their difference. The case of  $aRb$  and  $bRa$  ( $R$  either asymmetrical or non-symmetrical) does not show that two complexes can just differ.

4. On the nonreductionist conception, a state of affairs is a connectedness of constituents without a connector 'responsible' for this connectedness. This implies that (S1) *a's being F* and (S2) *b's being G* have no constituent in common. And yet each is a state of affairs, and so they appear to have the universal *being a state of affairs* in common. Now this is puzzling. If S1 and S2 have no constituent in common, how do we explain the fact that they are both states of affairs? This is no problem for the reductionist who posits a universal instantiation relation in both; he can say that they are both states of affairs because one and the same constituent ties their respective primary constituents into states of affairs. There is a universal of *being a state of affairs* because there is a universal of *instantiation*. But the nonreductionist cannot say this. What he must say is that there is no (or need not be any) universal of *being a state of affairs* because there is no (or need not be any) universal of *instantiation*. So the nonreductionist faces the problem of explaining why we group all states of affairs together as states of affairs. Armstrong with his characteristic intellectual honesty recognizes the problem. In the case of *a's being F* and *b's being F* he says that it is the common universal F-ness that accounts for their both being states of affairs.<sup>35</sup> But what if there is no common universal as there cannot be when we consider all states of affairs? Armstrong's solution is this: ". . . the unity of the class of *all* the states of affairs is given by the unity of the class of all the universals. This latter, in turn, would seem to flow from the essential nature of universals: their promiscuous repeatability."<sup>36</sup>

But what could this mean? It cannot mean that what universals have in common is repeatability, and that this repeatability is also what states of affairs have in common. For it is clear that states of affairs are (thick) particulars and are thus unrepeatable. This is the famous "victory of particularity." Combine a (thin) particular and a universal and you get a (thick) particular. Nor can Armstrong mean that what all states of affairs have in common is that they include universals. For this is also true of sets, sums, and conjunctions of universals.

Clearly, what all states of affairs have in common is a peculiar sort of unity of their respective constituents. Each state of affairs is *a* unity of *its* constituents, but if unity is to be common, there must be that which is the universal ground of these particular unities. The reductionist will say that this is the universal of instantiation. In the next section I will float the suggestion that there is an external unifier that is responsible for the unity of each fact's constituents. But Armstrong, and nonreductionists generally, are not in a position to specify in a satisfactory manner that which is common to all states of affairs as states of affairs.

### 2.3. *Ad(4): Dependence is true*

Given that there are facts, as the truth-maker argument implies, the only question concerns their nature. There are only three possible theories: either the unifier of a fact's constituents is a further constituent as on the reductionist approach; or the unifier is the fact itself as on the nonreductionist approach; or the unifier of a fact's constituents is external to the fact and its constituents. Since both the reductionist and nonreductionist approaches are incoherent, it follows that the unifier must be external. An external unifier is a condition of the very *possibility* of facts. Now necessarily, a fact exists if and only if its constituents are unified. Indeed, we can go further and say that the existence of a fact is identically the unity of its constituents. So if the unifier is external to facts and their constituents, and if the unifier grounds their existence (by grounding the unity of their constituents), it follows that facts are ontologically dependent on the external unifier, dependent on it for their very existence. Facts then are not 'independent reals' but dependent entities. They exist all right, but they exist *ab alio*.

Thus by sheer reflection on the nature of facts (the existence of which is established by the truth-maker argument), we can validly infer the existence of an external unifier, and this without the use of any such dubious principle as that of sufficient reason.

Although both the reductionist and nonreductionist approaches are incoherent, each contains a grain of truth, and I take it as a point in favor of the proposed theory that it can incorporate and preserve these grains of truth. We may think of the present theory as a synthesis in which the thesis of reductionism and the antithesis of nonreductionism are *aufgehoben*, 'sublated.' (But the allusion to Hegel should not suggest that we are departing from standard logic with its *horror contradictionis*: thesis and antithesis are logical *contraries*, not *contradictories*, of each other and so can both be false, as indeed they are both false.) The reductionist sees that there cannot be anything 'in' a fact or 'to' a fact but its constituents; as a complex, it cannot be an entity in addition to its constituents. Seeing that this approach cannot accommodate

the crucial *unity* of a fact's constituents, without which no fact would be up to the task of truth-making, the nonreductionist embraces the other extreme, securing unity, but at the expense of compromising if not abandoning the insight that a fact is a complex, a whole of parts.

But with an external unifier we can accommodate and reconcile the opposing insights. A fact is nothing in addition to its constituents, but it is nonetheless more than its constituents as their *unity*. If this is not to be a bare-faced contradiction, the fact's unity cannot derive either from itself or from anything internal to itself. Its unity must therefore derive from an external unifier. If there is no external unifier, then facts are impossible. But facts are actual, hence possible, by the truth-maker argument. Therefore, there is an external unifier.

Let me now summarize this from a slightly different angle. The unity of a fact's constituents is not nothing, but it is not anything *in* the fact since it cannot be, or be derived from, a further constituent on pain of a Bradleyan regress. But the unity of a fact's constituents is not identical to the fact either, since the unity of constituents is obviously distinct from the constituents. Of course, a fact is *a* unity of constituents, but the *unity* of its constituents must not be confused either with the fact or with its constituents. (Compare: Every individual is an existing individual, but the existence of an individual is not to be confused either with the individual or with its essence.) So how can the unity of a fact's constituents be something real if it is neither in the fact nor identical to the fact? Only in one way: the unity is not independently real, but derives from a unifier distinct from the fact and its constituents.

#### 2.4. *The external unifier exists of absolute metaphysical necessity*

I now want to substantiate something I said in my opening advertisement for the present argument. I said that the existence of the unifier is unconditionally necessary since it follows from the mere possibility of facts, which exists in every possible world. We must now examine this argument in detail, and meet an objection.

That there is no possible world without the possibility of facts may be demonstrated as follows:

- a. Facts exist (From the truth-maker argument);
- b. It is possible that facts exist (*Ab esse ad posse*);
- c. If it is possible that facts exist, then necessarily it is possible that facts exist (by the characteristic S5 axiom of modal propositional logic);
- d. Necessarily, it is possible that facts exist (by Modus Ponens from (b) and (c)).

What this little argument shows is that the possibility of facts is accessible from every possible world. Every world is such that, relative to it, it is possible that there be facts. This amounts to saying that this possibility is not contingent, i.e., does not vary from world to world. And note that this is established from the premise that there is at least one fact. The necessary possibility of facts is proven from the premise that there are facts and not from the mere conceivability of them.<sup>37</sup> Thus (a) is not superfluous. It does real work. Although (d) is necessarily true, and thus needs no ground of its *being* true, it needs a ground of its *being-known* to be true, and this is supplied by contingent proposition (a) in conjunction with (c).

The inference from (b) to (c) is justified by the characteristic S5 axiom. But here caution is advised. If a *particular* fact F exists, it is possible that F exists. Does it follow that it is necessarily possible that F exist? Does the possibility of F's existence exist in every possible world, including those worlds in which F does not exist? If the existence of a fact is the unity of its constituents, then the nonexistence of a fact is the disunity of its constituents.<sup>38</sup> But this implies that in a possible world in which fact F does not exist, the *de re* possibility that precisely F – that very fact – exist does not exist either. This amounts to a counterexample to the characteristic S5 axiom. From 'Possibly, *x* exists' one cannot infer 'Necessarily, possibly *x* exists' where '*x*' ranges over facts. This is because, on our theory, the possibility of a fact's existence exists if and only if the fact exists. Thus the possibility of a fact's existence is contingent upon the external unifier's unifying to exactly the same extent as the fact's existence is. In theological terms, God creates *a* and with it *a*'s possibility only in some possible worlds. Thus it is not the case that *a*'s possibility (the possibility of *a*'s existence) exists in all possible worlds. Creation is not the actualization of a necessarily pre-existent possibility; but the creation of an individual together with its possibility. God creates from nothing, not from possibilities. Naturally, this is but an illustration; I am not assuming that God exists.

But (b) – 'Possibly, facts exist' – is not about any specific individuals; it says that it is possible that some facts or other exist. That is, it is possible that appropriate constituents be united to form facts, and this is a possibility that is accessible from every possible world. For the constituents are available in every possible world. Thus it seems we can still validly move from (b) to (c).

But I hear an objection coming. "Since the possibility of there being some facts or other exists in every possible world, i.e., necessarily exists, it has no need of God or an external unifier as ground. Only what is contingent needs a ground. You seem to have landed in a dilemma. An argument from particular facts (or from the singular possibilities of particular facts) cannot terminate in

an unconditionally necessary unifier, since these possibilities are contingent. So you invoke the general possibility of there being some facts or other, which you claim exists necessarily. But an argument from this general possibility cannot get off the ground precisely for the reason that this possibility necessarily exists, and so has no need of a ground.” This objection involves an *ignoratio elenchi*. The argument does not move from the necessarily *existence* of the generally possibility to God as ground of existence, but from its *being a possibility* to God as ground of possibility. This will become clear as we proceed.

What we need, then, is an argument from the general possibility that some facts or other exist to an external ontological ground of this possibility. The argument quickly materializes once we reflect on the following principle according to which, necessarily, whatever is possible is possibly actual (PPA).

To work up to an appreciation of (PPA) suppose we begin at the opposite end. If a thing is actual it is of course possible. Actuality is not out of all relation to the possible; it is precisely the actuality *of* the possible. But if a thing is possible, it does not follow that it is actual: the possible ‘outruns’ the actual. The actual is a *proper* subset of the possible, which implies that there are possibles that are not actual. Nevertheless, the (merely) possible is not out of all relation to the actual; it is precisely that which is *possibly* actual, that which *can* be (or *could* be) actual, that which is *actualizable*. It is part of the very nature of the possible to be possibly actual: the merely possible is not necessarily such that it is actual (else it could not be merely possible), but it *is* necessarily such that it is *possibly* actual. If one were to deny (PPA), one would be saying that an item can be possible and yet *not* possibly actual, *not* such that it can be actual, *not* actualizable. And that appears to be a flat contradiction. If we understand possibility at all, we understand it to stand in the sort of relation to actuality encapsulated in (PPA). A modal doctrine such as David Lewis’ which is unable to accommodate the truth of (PPA) is unacceptable.<sup>39</sup>

Now given (PPA), the general possibility that there exist some facts or other (as opposed to no facts at all) is possibly actual. It is actualizable. But it is actualizable only if specific facts are actualizable. Thus every world is such that there could have been some facts or other in it only because every world is such that there could have been some *specific* (particular) facts in it. It is just that these specific facts are different for different worlds. No one of them is such that its singular possibility exists in every world. What exists in every world is only the general possibility that there be some facts or other. But since the actualization of this general possibility cannot come about without the actualization of specific facts, the actualization of the general possibility,



no less than the actualization of singular possibilities, requires the unifier. Thus the unifier is not only the ground of the existence and possibility of *Socrates* (assuming concrete contingent individuals or ‘thick particulars’ to be facts) but also of the possibility of facts in general. The external unifier is the ground of this general possibility in that it is the ground of its possibly being actual, not the ground of its existence. The existence of the possibility of contingent beings in general is necessary existence (as per the (a)–(d) argument above) and so does not need a ground.

The argument, then, is this:

5. Although facts, which are contingent beings, do not exist in every world, the general possibility P that there exist some facts or other exists in every world.
6. What is possible is actualizable.

Therefore

7. P is actualizable in every world.
8. For any world W, P is actualizable in W only if specific (particular) facts are actualizable in W.

Therefore

9. For any world W, specific facts are actualizable in W.
10. For any world W, if specific facts are actualizable in W, then the unifier exists in W.

Therefore

11. The unifier exists in every possible world, and is therefore an absolutely necessary being.

### 3. *Et hoc omnes intelligunt deum?*

“And this everyone understands to be God.”<sup>40</sup> We cannot acquiesce in this facile locution with which Thomas Aquinas terminates the proofs of his *quinque viae*. So I need to sketch in some of the further attributes of U, attributes that tend to qualify U for divine status. I will adopt a ‘bottom-up’ as opposed to a ‘top-down’ approach. A ‘top-down’ approach begins with a fixed concept of God and tries to show that this concept is instantiated. This is the way of *hubris*: how can one claim to know that one’s concept of God is adequate? In particular, how can an atheist claim to be so *en rapport* with the divine nature as to know what no such nature can exist? On a ‘bottom-up’ approach, the concept of God is not something given but something to be worked out. This, the way of humility, is more in keeping with our status as philo-sophers, *seekers* of truth. Thus what follows is an incomplete groping towards God, and not an attempt to prove the reality of any specific concept of God from any specific religious tradition. But it would be a colossal error

to suppose that the sort of project I am engaged in could only culminate in a 'God of the philosophers.' The fideist opposition of the 'God of the philosophers' to the 'God of Isaac, Abraham and Jacob' is quite hopeless. But that's another article.

1. First of all, is the external unifier U one or many? Is there one unifier for all facts, or do different facts have different unifiers? Since all facts have facthood in common, that which makes facts facts, which is the unifier of their respective constituents, must be common. It is therefore one, not many. God is one; so is U. This of course does not show that U is God; it merely removes a reason for thinking that U is not God.

2. Since the existence of facts is logically prior to their standing in causal relations, the ontological ground of the existence of facts cannot be an empirical cause. If it is any sense a cause, it must therefore be a metaphysical cause such as God is thought to be.

3. Could U be an abstract entity? It certainly cannot be a property internal to a fact for reasons given in section II. The unity of a fact cannot be explained in terms of any of its constituents. But neither could it be a property external to a fact. By definition, properties are instantiable entities. So if U were a property of facts, U would be instantiated by facts. But since, *pace* Meinong, nothing can instantiate any property unless it exist, a fact cannot instantiate any property unless its constituents are unified, the existence of a fact being just the unity of its constituents. Thus it would be viciously circular to hold that it is in virtue of instantiating a property that a fact's constituents are unified. Plainly, U cannot be a property, whether internal to a fact or external to it.

Hector-Neri Castaneda has argued that ontological operators are a *sui generis* subcategory of abstract entities.<sup>41</sup> Could U be an operator in Castaneda's sense? Manifestly, God cannot be an abstract entity, if by this is meant one that is causally inert. Creation is a species of causation. In creating, God agent-causes the existence of contingent beings. So if U is an ontological operator in Castaneda's sense, then U cannot be identified with God.

Clearly, U must 'operate' in some sense: it must form or create or produce facts out of pre-existent materials (thin particulars, universals, whatever else). But U cannot be an operator in Castaneda's sense. Consider his concretizing operator, *c*, which operates upon sets of properties to form individuals.<sup>42</sup> Take the set consisting of the properties of being golden and being a mountain, to coin an example. The concretizing operator operates upon this set to form the nonexistent individual, *the golden mountain* = *c*{G, M}. What is important to realize for our purposes is that the connection between *c* and {G, M} is noncontingent: *c* cannot fail to operate on this set. No Bradleyan wedge can be driven between *c* and {G, M}. Indeed, *c* cannot fail to operate on every

set of properties, compossible or not: there are all the individuals there might have been. For this reason alone, U cannot be an operator in Castaneda's sense. For U operates only on some sets of fact-appropriate constituents, and the ones it operates on are such that it might not have operated on them. In a word, the connection between U and a set or ordered  $n$ -tuple of fact-appropriate constituents is contingent. Thus, given that  $a$ 's *being F* contingently exists (i.e., is contingently such that its constituents are unified), U's unifying of these constituents must also be contingent: it cannot flow from the nature of U.<sup>43</sup>

Since U cannot be an abstract property or an abstract operator, I conclude that it cannot be an abstract entity. (I won't waste time arguing that U cannot be a number, a set, a Fregean proposition, a concept, a quantifier, a mereological fusion . . .)

4. Could U be a material particular? This is clearly impossible. Material particulars, like all thick particulars, are contingent facts. But no contingent particular could be the external unifier on pain of a vicious infinite regress. This is further developed in #6 below. Besides, we have already seen that U exists of absolute metaphysical necessity. But no material particular exists of absolute metaphysical necessity. Ergo, etc.

5. If U is neither abstract nor material, this would seem to leave only one other possibility, namely, that U is a mind. For it is reasonable to hold that everything is either a mind (or a content in a mind) or a body or an abstract entity, and it is clear without argument that U cannot be a content in a mind. And if U is a mind, we will be able to understand how U produces facts out of fact-friendly constituents. For we have a model of U's unifying activity in the synthetic activities of our own minds. We will also be able to understand how the postulation of external U avoids Bradley's problem. Let's begin with this last challenge.

If an internal unifier gives rise to the Bradley problem, as we saw above, why shouldn't an external one do so as well? Apparently, there will still be the problem of how U connects with what it unifies given the contingency of the connection. If the difference between the fact  $aRb$  and the mere sum  $a + R + b$  demands an ontological ground distinct from these constituents, then why doesn't the difference between  $U \langle a, R, b \rangle$  and  $U + \langle a, R, b \rangle$  demand an ontological ground distinct from this second sum of items?

Thus the present theory seems to face a dilemma. If U's being a unifying unifier (as opposed to an inert item that in turn needs unification with what it unifies) means that U necessarily unifies the sets of fact-appropriate constituents that it does unify, then the facts that result will be necessarily existent – which contradicts their being contingent. If, on the other hand, it remains contingent that U unify the sets of constituents that it does in fact unify, then

how can U be a *unifying* unifier, one for which the difference between U qua unifying the members of set S, and the mere sum, U + the members of S, cannot arise? It may seem that the external unifier theory makes no advance at all over the theory of an internal unifier, which, as we saw, succumbs to the Bradley objection.

But it does make an advance if we are willing to construe U robustly enough. (And since we have proven that external U exists, we are forced into a robust construal.) U must satisfy three constraints; (i) the connection between U and its operand must be contingent and so cannot be grounded in the nature of U; (ii) the connection cannot be brute, and so must have a ground; (iii) the ground must lie in U itself on pain of a vicious infinite regress. Now if the connection between U and its operand cannot be grounded in the nature of U, and yet must be grounded in U, then U must have the power of contingent self-determination: it must have the power to contingently determine itself as operating upon its operand. In other words, if U is the ground of the contingent unity of a fact's constituents, then U contingently *grounds its grounding* of the unity of the fact's constituents.

A model for U that satisfies the above constraints is available in our own freedom which is a power of contingent self-determination. Suppose I freely unify disparate elements in the synthetic unity of one consciousness: I judge that *a* is F, or perhaps I merely entertain the thought that *a* is F. The connection instituted is contingent; both the connection between the subject and predicate representations, and the connection between me and the judgmental content. The connections are contingent since I could have refrained from combining the representations. But the connections are not brute since they have a ground in my combining activity. Thus constraints (i) and (ii) are satisfied. To be precise, we have in our power of combination a model with which to understand how constraints (i) and (ii) could be satisfied.

As for the third constraint, my consciousness C, as the unifier of the subject- and predicate-representations, is not an inert ontological ingredient that itself needs unification with what it unifies. It is not as if there must be a C' which unifies *a*, C, and F-ness, a C'' which unifies *a*, C, C', and F-ness and so on into a vicious infinite regress. A Bradley-type regress cannot arise precisely because C is a unifying unifier in a way in which a relation cannot be. An external relation is not exhausted in its relating of what it relates, else it would be essential to its terms and hence not external. But if it is not exhausted in its relating of what it relates, then it is distinct from them and the problem arises as to how it forms a unity with them. You cannot say that a relation, in relating its relata, relates itself to them in such a way that it grounds not only their togetherness, but also its togetherness with them. For

no relation has the power of contingent self-determination. But this is exactly the power consciousness exercises when it unifies disparate representations; it establishes their togetherness, and in so doing, establishes its togetherness with them, and it does all of this freely. Even if, as a matter of fact, we lack this sort of libertarian freedom, we can conceive it, and this is all that is necessary for it to function as a model of the external unifier's activity.

Thus the difference between  $U \langle a, R, b \rangle$  and  $U + \langle a, R, b \rangle$  is grounded by  $U$  itself in a way in which an external relation  $R$  cannot ground the difference between  $aRb$  and  $a + R + b$ .

This of course requires that we impute to  $U$  the power of contingent self-determination, which in turn demands that  $U$  be a mind.

6. Could  $U$  be a contingently existent mind?  $U$  is a thick particular, and a thick particular is a state of affairs. The existence of a state of affairs, however, is the unity of its constituents. So if  $U$  contingently exists, then  $U$ 's constituents are contingently unified. Now any fact whose constituents are contingently unified requires a unifier. No such fact can just be unified as a matter of 'brute fact.' This follows from the incoherence, proven above, of the nonreductionist conception of states of affairs. But it is self-evident that nothing can unify itself, in the positive sense of this phrase, so  $U$  cannot unify itself. A contingently existent  $U$ , then, would require a unifier distinct from  $U$ . But then we are embarked upon a vicious infinite regress. It follows that  $U$  is a necessarily existent mind.

7. If  $U$  is to be God,  $U$  must be the creator of thick particulars *ex nihilo*. This phrase is of course to be taken privatively, not positively: the idea is not that there is a stuff called 'nothing' out of which God creates; it is rather that it is not the case that there is something (distinct from himself) out of which God creates. Thus it may so far appear that all we have arrived at is a sort of demiurge that produces thick particulars (which are facts) out of pre-existent materials, namely universals and thin particulars, whose pre-existence would then be unaccounted for. But what is a universal? Perhaps it is identifiable with a concept in the divine mind. To create out of universals would then not be to create out of something distinct from God. To create out of universals would be to create out of nothing given that this means: to create, but not out of something distinct from God. And what is a thin particular? A thing taken in abstraction from its properties. But a thing taken in abstraction from its properties is not a thing that can pre-exist, or exist apart from, its unification with properties in the way a pin-cushion can exist apart from pins. Creation is not analogous to the sticking of pre-existent pins into a pre-existent pin-cushion; it is analogous to the combining of representations in the synthetic unity of one consciousness. The representations, taken singly, cannot exist apart from consciousness, and their unity cannot exist apart from conscious-

ness. This analogy may have difficulties of its own, but I think it shows that the present approach can accommodate the fact that divine creation is *creatio ex nihilo*.

#### 4. Coda

Have I proven the existence of God? At best, I have made a rational case for the existence of something like God (proto-God) to someone who accepts all my premises and all my inferences. This, a modest result, is not to be sneered at. For the premises are reasonable if not non-negotiable, and the inferences are, I think, all valid. Perhaps it is not too much to say, with Pascal, that “There is light enough for those who desire to see, and darkness enough for those who are contrary-minded.”<sup>44</sup>

#### Notes

1. Immanuel Kant, *Lectures on Philosophical Theology*, trans. Allen W. Wood and Gertrude M. Clark (Ithaca: Cornell University Press, 1978), p. 23.
2. But suppose someone were to argue as follows. (1) The possibility that the minds with which we are acquainted, human and animal minds, could exist disembodied is inconsistent with the current state of scientific knowledge. (2) If all the minds with which we are acquainted are such that the possibility of their being disembodied is inconsistent with the current state of scientific knowledge, then it is a good induction, if not a necessary entailment, that the same holds for all minds, including any divine mind there might be. Therefore, (3) given that God is a disembodied mind, his existence is inconsistent with the current state of scientific knowledge. Therefore, (4) at least one member of any set of premises that entails the existence of God must be inconsistent with the current state of scientific knowledge. Some theists would respond to this argument, quixotically in my opinion, by denying (2). See my “Could a Classical Theist be a Physicalist?” *Faith and Philosophy*, Vol. 15, No. 2 (April 1998), pp. 160–180. I would respond to it by denying premise (1). I cannot explain this any further here except to say that (1) is but an expression of scientific prejudice.
3. Kant, *op. cit.*, p. 31.
4. PSR may not be in as bad a shape as some philosophers think it is. See my “On an Insufficient Argument Against Sufficient Reason,” *Ratio*, Vol. 10, No. 1 (April 1997), pp. 76–81.
5. This is especially obvious on an Anselmian approach. If God is “that than which no greater can be conceived” (*Id quo maius cogitari non potest*), then it is clear that a God who exists necessarily or in all possible worlds is greater than one who exists contingently or in only some possible worlds.
6. E.g., sunlight, even if it were metaphysically, and not merely nomologically, necessary for photosynthesis, would not be metaphysically necessary in itself.
7. Note that if every world contains the possibility of some contingent beings or other, it does not follow that every world contains the possibility of any particular contingent being such as Socrates. More on this below in section 2.4.

8. This argument will be presented more carefully below in section 2.4.
9. The question whether truth-bearers are sentences or propositions or judgments or something else or all of the above is not one on which I need to take a stand for present purposes. To save ink, I will continue to speak just of sentences, but without meaning to exclude the other candidates. The main idea, of course, is that truth-bearers, whatever we decide they are, require truth-makers.
10. I am using 'brute fact' in the ordinary way to refer to what is contingently the case, but has no explanation. By itself, this usage does not imply that there are facts in the sense to be defended below.
11. Aristotle, *Metaphysics*, trans. Richard Hope (Ann Arbor: University of Michigan Press, 1968), p. 197; 1051b5. I am not suggesting that Aristotle holds to an ontology of facts.
12. So the truth-maker, though it cannot be a sentence or a proposition on pain of a vicious infinite regress, must be proposition-like, as will emerge below.
13. What about 'Tim exists'? Isn't this contingent truth made true by Tim? It is if Tim is taken to be a state of affairs, one consisting of a thin particular's instantiation of all of Tim's non-relational properties. But then we are at the desired conclusion that truth-makers are states of affairs or facts. If, on the other hand, Tim is ontologically structureless, a "blob" rather than a "layer-cake" in Armstrong's scholarly terminology, then it is difficult to see how such a blob, being structureless, could constrain (determine, entail) the truth of 'Tim exists.' Tim, or Tim's existence, may be a necessary condition of the truth of any sentence about him, and thus by default of the truth of 'Tim exists'; but it doesn't follow that Tim, or Tim's existence, makes true 'Tim exists.' For more on blobs, layer-cakes and thin particulars, see D. M. Armstrong, *Universals: An Opinionated Introduction* (Boulder: Westview Press, 1989), pp. 76–77; 94–96.
14. Together with almost all truth-maker theorists, I am assuming what Josh Parsons calls the principle of truth-maker essentialism, which he seeks to distinguish from the truth-maker principle *per se*. "According to the truthmaker principle, every truth has a truthmaker, in virtue of which that truth is true. According to truthmaker essentialism, every truth has a truthmaker, *which is essentially that truth's truthmaker.*" I would resist this distinction if I had the space. See his "There is no 'Truthmaker' Argument against Nominalism," *Australasian Journal of Philosophy* vol. 77, no. 3 (September 1999), pp. 325–334.
15. Some propositions are false, but no fact is 'false,' i.e. every fact exists or obtains or is actual. Thus there are no merely possible facts if by this is meant a fact in the mode of possibility. A merely possible fact is not a fact ('merely possible' here is what Peter Geach calls an *alienans* adjective), but the possibility of there being a fact, i.e., the possibility that certain fact-friendly constituents be combined to form a fact. Since propositions are both true and false, while all facts are 'true' (i.e., actual or existent), we have here a respect in which facts are not proposition-like. See the following note.
16. The qualifier 'concrete' is meant to make it clear that states of affairs as invoked here have nothing to do with what Roderick Chisholm and others have called 'states of affairs.' For Chisholm, states of affairs are "abstract entities which exist necessarily" and "are in no way dependent for their being on the being of concrete, individual things." See his *Person and Object: A Metaphysical Study* (La Salle, IL: Open Court, 1976), p. 114. It is clear that Chisholmian states of affairs cannot play the role of truth-makers; indeed it would seem that they are themselves in need of something like truth-makers to distinguish those that obtain from those that do not.
17. In a complete discussion we would have to consider whether or not tropes could play the role of truth-makers. Here I just assume that they cannot.

18. For a recent development of this truth-maker argument for states of affairs, see David Armstrong, *A World of States of Affairs* (Cambridge: Cambridge University Press, 1997), pp. 113–119. For an attack, in my judgment unsuccessful, on states of affairs, see Julian Dodd, “Farewell to States of Affairs,” *Australasian Journal of Philosophy*, vol. 77, no. 2 (June 1999), pp. 146–160. An earlier version of my paper included a response to Dodd which I have removed in the interest of streamlining my over-all argument.
19. By ‘entail,’ I usually mean ‘metaphysically entail.’ A proposition *p* metaphysically entails a proposition *q* if and only if there is no metaphysically possible world in which *p* is true and *q* is false.
20. E.g., for any two items, there is their mereological sum.
21. Armstrong, *op. cit.*, p. 118. One finds a similar nonreductionist approach in Herbert Hochberg, *Thought, Fact, and Reference* (Minneapolis: University of Minnesota Press, 1978), p. 339: “facts cannot be reduced to their elements and, hence, are not analyzable.” “Facts must, therefore, be recognized as existents in addition to constituents of facts.”
22. See my article, “Three Conceptions of States of Affairs,” *Nous*, Vol. 34, No. 2 (June 2000), pp. 237–259.
23. Cf. F. H. Bradley, *Appearance and Reality* (Oxford: Oxford University Press, 1893), ch. III. For more on Bradley, see my “Relations, Monism, and the Vindication of Bradley’s Regress,” not yet committed for publication.
24. Gustav Bergmann, *Realism* (Madison: University of Milwaukee Press, 1967), p. 9.
25. For a detailed exfoliation of this problem, together with a response to some objections, see my “Three Conceptions of States of Affairs,” *op. cit.*
26. Gottlob Frege, “Function and Concept” in Geach and Black trans., *Translations from the Philosophical Writings of Gottlob Frege* (Oxford: Basil Blackwell, 1960), p. 24.
27. David Lewis, “Critical Notice of Armstrong, D.M., *A Combinatorial Theory of Possibility*,” *Australasian Journal of Philosophy* vol. 70, no. 2 (June 1992), p. 213.
28. Armstrong, *op. cit.*, p. 118.
29. Cf. David Lewis, *art. cit.*, p. 215: “If I were committed to universals myself, I would be an *Ostrich Realist*: I would think it was just true, without benefit of truth-makers, that a particular instantiates a universal.”
30. D. M. Armstrong, “A World of States of Affairs,” *Philosophical Perspectives* 7 (1993), pp. 430–431.
31. *Ibid.*, p. 431.
32. As Herbert Hochberg points out in “Facts and Classes as Complexes and as Truth Makers,” *The Monist*, vol. 77, no. 2 (1994), p. 187. Or at least it appears to be question-begging. One cannot know the premise (*aRb* and *bRa* differ without differing in a constituent) to be true without knowing the conclusion (‘States of affairs exist’) to be true.
33. D. M. Armstrong, *A World of States of Affairs*, p. 121ff.
34. *Ibid.*, p. 122.
35. *Ibid.*, p. 127.
36. *Ibid.*
37. Conceivability is no sure guide to real possibility.
38. *Vide* note 15 *supra*.
39. Exercise for the reader: Explain why said modal doctrine is incompatible with (PPA). Hint: explore the consequences of the alleged indexicality of ‘actual.’
40. Thomas Aquinas, *Summa Theologica*, Prima Pars, quest. 2, art. 3.
41. H.-N. Castaneda, “Individuation and Non-Identity: A New Look,” *American Philosophical Quarterly* vol. 12, no. 2 (April 1975), p. 138.



42. *Ibid.*, p. 139.
43. Castaneda's operator theory is more fully discussed in "Three Conceptions of States of Affairs," *op. cit.*
44. Blaise Pascal, *Pensees*, trans. H. F. Stewart (New York: Pantheon Books, 1950), p. 143.

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