

WHAT AN OMNIPOTENT AGENT CAN DO

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Judging from the recent literature, the problem of defining or analyzing the concept of omnipotence is a formidable one. One author has claimed to have proved the impossibility of defining omnipotence,¹ and of those who have recently made the attempt, none has succeeded in providing a definition which is not subject to refutation by counter-example.²

The leading and novel idea of our paper is that if one is sensitive to the essential *temporal* properties of states of affairs, then one *can* construct an adequate definition of omnipotence. Working from this insight, we formulate an informative and consistent analysis of omnipotence which incorporates the following two principles: first, that what an agent brings about can be "cashed out" in terms of his bringing it about that an *unrestrictedly repeatable* state of affairs obtains; second, that by making use of the notion of unrestricted repeatability, one can single out a class of states of affairs, S, such that necessarily, an agent, A, is omnipotent just in case for any member, e, of S, A has the ability to bring it about that e obtains.

I

Our analysis of omnipotence will apply to any omnipotent agent, whether his omnipotence is an accidental (contingent) or essential (necessary) property of him. Thus our analysis pertains to both divine and non-divine omnipotence.

Since we think that the concept of an agent's performing an action outside of time is incoherent, we presuppose that if an omnipotent agent brings it about that some state of affairs obtains, then his performance occurs at some time. Similarly, we presuppose that *what* he brings about occurs at some time.

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We shall utilize the notion of a *state of affairs*.³ As we understand this concept, a state of affairs is a propositional entity. Thus, states of affairs, like propositions, may entail one another, and have modal characteristics such as being possible, impossible, necessary, or contingent. Entities of this kind can obtain at a given time or fail to obtain at a given time. For example, if Socrates is walking at *t*, then the state of affairs, Socrates is walking, obtains at *t*. And if Socrates is not walking at *t*, then the state of affairs, Socrates is walking, fails to obtain at *t*. Whenever we say that an agent *brings about a state of affairs s*, and that *s* obtains at *t*, what we mean is that he *brings it about that s obtains*, and that *s* obtains at *t*.

What agents literally bring about is a matter of some controversy. Some philosophers argue that agents bring about concrete events; others contend that agents bring about occurrent states of affairs. Our account is neutral in this regard. If agents bring about concrete events, then concrete events instantiate, satisfy, or are tokens of states of affairs. Hence, if one operates with an ontology which includes both states of affairs and concrete events, then it is a conceptual truth that if one brings about a concrete event, then one brings it about that a corresponding state of affairs obtains.⁴

Although we define omnipotence in terms of an agent's having the abilities to bring it about that certain states of affairs obtain, our definition can be reformulated in terms of an agent's having the abilities to make certain sentences, statements, or propositions true, where these are understood as linguistic or quasi-linguistic entities. Analogues to the key concepts which our definition involves can be expressed in a straightforward way in these alternative theoretical vocabularies.

We accept the following implication of the timeless theory of truth: a *dated* state of affairs, for example, Socrates is walking at *t*, is necessarily such that if it obtains, then it obtains for all of time. In this context, it is important to distinguish two states of affairs which may be expressed by the sentence, 'Socrates is walking now'. If 'now' designates a time, then the state of affairs expressed by 'Socrates is walking now' is a dated state of affairs. On the other hand, there is a perfectly ordinary interpretation of this sentence according to which 'now' functions not as a singular term but as an adverb. In this case, 'now' expresses the property of being in the present, and the state of affairs expressed by 'Socrates is walking now' is the state of affairs,

Socrates is walking presently, or, equivalently, Socrates is walking. This latter state of affairs can also be expressed by the sentence 'Socrates is walking' when this sentence is in the present tense. The state of affairs, Socrates is walking, and each of its equivalents, is not a dated state of affairs. Each of these states of affairs can obtain at a given time, fail to obtain at a second time, and obtain at a third time, and so forth.

II

Certain philosophers have attacked the problem of defining omnipotence by arguing that the following provides at least the beginning or core of a successful definition:⁵

(D1) x is omnipotent at $t = \text{df. } (s)$ (it is possible for some agent to bring about $s \rightarrow$ at x has the ability to bring about s).⁶

In D1, x ranges over agents and s over states of affairs. Clearly, if any state of affairs, s , has the property of *being necessarily such that no agent brings it about*, then an omnipotent agent does not have the ability to bring about s . Thus, one reason why D1 is attractive at least as a starting place is that D1 does not require that an omnipotent agent have the ability to bring about a state of affairs which has this property. As the following arguments show, all non-contingent states of affairs have this property.

Certainly it is not possible for some agent to bring about an *impossible* state of affairs (e.g., there exists a round square), since if it were, it would be possible for an impossible state of affairs to obtain, which is a manifest contradiction.

Is it possible for some agent to bring about a *necessary* state of affairs (e.g., $2 + 2 = 4$)? If it is possible for some agent, A , to bring about a necessary state of affairs, s , then possibly, there are circumstances in which (i) A brings about s , and (ii) if A had not acted, then s would not have obtained. But a necessary state of affairs obtains whether or not anyone acts. This is incompatible with (ii); hence, it is not possible for some agent to bring about a necessary state of affairs.

Since D1 requires an omnipotent agent to have the ability to bring about some state of affairs s only if it is possible for some agent to bring about s , and since it is not possible for some agent to bring

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about any non-contingent state of affairs, D1 does not require an omnipotent agent to have the ability to bring about any non-contingent state of affairs.

Our strategy for the remainder of this paper is to take up counter-examples to D1, and make restrictions on the range of quantification over states of affairs in D1 in order to overcome these counter-examples.

III

If there is a state of affairs, *s*, such that: (i) possibly, some agent brings about *s*, and (ii) possibly, there is an omnipotent agent who does not have the ability to bring about *s*, then it is possible for an agent to be omnipotent without satisfying D1. If an agent can be omnipotent without satisfying D1, then D1 is inadequate as an analysis of omnipotence because it fails to provide a logically necessary condition for omnipotence. Thus if there is a state of affairs like *s*, then it is a counter-example to the claim that D1 provides a logically necessary condition for omnipotence. As we will now proceed to show, D1 is faced with a wide variety of such counter-examples.

Consider the following state of affairs:

- (1) The Nile is flooded throughout the year 44 B.C.

An agent, A, acting earlier than 44 B.C. can bring about (1) by bringing it about that the Nile is flooded for one year, when the flooding of the Nile which A brings about occurs throughout 44 B.C. Thus it is possible for some agent to bring about (1). Since D1 requires that an omnipotent agent have the ability to bring about every state of affairs which it is possible for some agent to bring about, D1 requires that an omnipotent agent have the ability to bring about (1).

One implication of the way in which the concepts of time and agency are understood in our ordinary conceptual scheme is that it is impossible for an agent acting at a time later than 44 B.C. to bring about (1). Since this conceptual scheme is a viable one, and it is doubtful whether there is a coherent alternative to it, we assume the truth of this implication.⁷ Now suppose there is an agent, call him 'Oscar', who is omnipotent in 1978. From the fact that it is impossible for an agent acting at a time later than 44 B.C. to bring about (1), it follows that in 1978 Oscar is unable to bring about (1). So

this is true of (1): possibly, some agent brings it about; and possibly, there is an omnipotent agent who lacks the ability to bring it about. Thus (1) is a counter-example to the claim that D1 provides a logically necessary condition for omnipotence.

If D1 is modified so that it does not require an omnipotent agent to have the ability to bring about (1), then (1) will not be a counter-example to the claim that D1 provides a logically necessary condition for omnipotence. As a first step towards amending D1 in the appropriate manner, notice that (1) is a *dated* state of affairs. Thus (1) has the property of being necessarily such that: if it obtains then it obtains for all of time, and if it does not obtain then it does not obtain for all of time. Other states of affairs which have this property include: $2 + 2 = 4$; it never rains on the plains of Spain; and Carter smiles at 12:00 noon E. S. T., June 20, 1978 A.D. We shall call states of affairs of this kind *eternal* states of affairs. The concept of an eternal state of affairs can be defined in precise terms as follows:

s is eternal = df. s is a state of affairs such that:

$\sim \diamond (Et) (Et') (t \neq t' \ \& \ s \text{ obtains at time } t \ \& \ s \text{ does not obtain at time } t')$.

Let any state of affairs which is not eternal be called a *noneternal* state of affairs. The notion of a state of affairs being noneternal is captured in the following definition.

s is noneternal = df. s is a state of affairs such that: $\diamond (Et) (Et') (t \neq t' \ \& \ s \text{ obtains at time } t \ \& \ s \text{ does not obtain at time } t')$.

For example, the state of affairs *Socrates is walking* is noneternal. This state of affairs can obtain on Monday, and fail to obtain on the following day.

Now let us restrict the range of quantification over states of affairs in D1 to those which are noneternal, and let the definition obtained by modifying D1 in this way be called D2. Since (1), and other eternal states of affairs, fall outside of the range of the quantifier in D2, D2 does not require that an omnipotent agent have the ability to bring about such states of affairs. Consequently, (1), and states of affairs like it, do not provide a counter-example to the claim that D2 provides a logically necessary condition for omnipotence.

However, the problem which certain eternal states of affairs pose

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for D1, is posed for D2 by certain noneternal states of affairs. For example, consider the following state of affairs:

(2) Mt. Vesuvius is erupting for the first time.

If Vesuvius erupts for the first time on Monday, then (2) obtains on Monday, and if Vesuvius does not erupt on Tuesday, then (2) does not obtain on Tuesday. Thus it is possible for (2) to obtain on Monday, and fail to obtain on the following day. Therefore (2) is noneternal.

An agent acting at a time prior to the first eruption of Vesuvius can bring about (2) by bringing it about that Vesuvius is erupting, when the eruption which he brings about happens to be the first one which Vesuvius undergoes. Thus it is possible for some agent to bring about (2). Since D2 requires that an omnipotent agent have the ability to bring about every noneternal state of affairs which it is possible for some agent to bring about, D2 requires that an omnipotent agent be able to bring about (2).

It is necessarily true that if (2) obtains at some time, t , e.g., Monday, and (2) fails to obtain at some time after t , e.g., Tuesday, then (2) does not obtain again at any subsequent time. It is useful to have a technical term which refers to this characteristic of (2). We shall say that (2) is *recalcitrant* at time t just in case there are two times t' and t'' such that $t \geq t'' > t'$, and (2) obtains at t' but does not obtain at t'' . Once (2) becomes recalcitrant it is impossible for it to obtain again. Thus it is impossible for an agent acting at a time at which (2) is recalcitrant to bring about (2).

Now suppose that in fact (2) obtains on Monday, but fails to obtain on the following days, and further suppose that Oscar is omnipotent on Wednesday. Since (2) is recalcitrant on Wednesday, and it is impossible for an agent acting at a time at which (2) is recalcitrant to bring about (2), it follows that on Wednesday Oscar is unable to bring about (2). So this is true of (2): D2 requires that an omnipotent agent has the ability to bring about (2), and it is possible for there to be an omnipotent agent who is unable to bring about (2). Thus (2) is a counter-example to the claim that D2 provides a logically necessary condition for omnipotence.

If D2 is amended so that it does not require that an omnipotent agent have the ability to bring about (2), then (2) will not be a counter-example to the claim that the amended definition provides a logically necessary condition for omnipotence.

As a first step towards amending D2 in the appropriate way, reconsider the fact that while it is possible for (2) to obtain on Monday, and fail to obtain on Tuesday; it is impossible for (2) to obtain on Monday, fail to obtain on Tuesday, and obtain once again on Wednesday. On the other hand, the state of affairs *Mt. Vesuvius is erupting* is *repeatable* in the sense that it is possible for it to obtain on Monday, fail to obtain on Tuesday, and obtain once again on Wednesday. (2) is not repeatable in this sense. The notion of a state of affairs being *repeatable* can be defined as follows:

s is repeatable = df. s is a state of affairs such that: $\Diamond (Et) (Et') (Et'') (t < t' < t'' \ \& \ s \text{ obtains at } t \ \& \ s \text{ does not obtain at } t' \ \& \ s \text{ obtains at } t'')$.

Let us restrict the range of quantification over states of affairs in D2 to those which are repeatable, and let the definition which results from amending D2 in this manner be called D3. Since (2), and similar states of affairs, are non-repeatable, they fall outside the range of the quantifier in D3, and D3 does not require an omnipotent agent to have the ability to bring about such nonrepeatable states of affairs. Consequently, (2), and states of affairs like it, do not provide a counter-example to the claim that D3 provides a logically necessary condition for omnipotence.

Unfortunately, the problem which certain nonrepeatable states of affairs pose for D2, is posed for D3 by certain repeatable states of affairs. For example, consider the following state of affairs.

(3) The Nile has flooded an odd number of times less than four.

If the Nile is flooded for the first time on Monday, then (3) obtains on Monday. If the Nile has flooded a second time on Tuesday, then (3) fails to obtain on Tuesday. If the Nile has flooded a third time on Wednesday, then (3) obtains on Wednesday. Lastly, if the Nile has flooded a fourth time on Thursday, then (3) does not obtain on Thursday. Thus it is possible for (3) to obtain on Monday, fail to obtain on Tuesday, and obtain once again on Wednesday; hence, (3) is repeatable.

An agent acting prior to the third time the Nile has been flooded can bring about (3) by bringing it about that the Nile is flooded, when the flooding which he brings about happens to be either the first or the third one which the Nile undergoes. Thus it is possible for

some agent to bring about (3). Since D3 requires that an omnipotent agent be able to bring about every repeatable state of affairs which it is possible for some agent to bring about, D3 requires that an omnipotent agent be able to bring about (3).

It is necessarily true that if (3) obtains at some time t_1 , e.g., Monday, and fails to obtain at some time t_2 which is after t_1 , e.g., Tuesday, and obtains at some time t_3 which is after t_2 , e.g., Wednesday, and fails to obtain at some time t_4 which is after t_3 , e.g., Thursday, then (3) does not obtain again at any subsequent time. We shall say that (3) is recalcitrant at time t just in case there are four times t_1, t_2, t_3, t_4 , such that $t \geq t_4 > t_3 > t_2 > t_1$, and (3) obtains at t_1 , does not obtain at t_2 , obtains at t_3 , and does not obtain at t_4 . Once (3) becomes recalcitrant it is impossible for it to obtain again. Thus it is impossible for an agent acting at a time which (3) is recalcitrant to bring about (3).

Suppose that in fact (3) obtains on Monday, fails to obtain on Tuesday, obtains on Wednesday, and fails to obtain on Thursday. Further suppose that Oscar is omnipotent on Friday. Since (3) is recalcitrant on Friday, and it is impossible for an agent acting at a time at which (3) is recalcitrant to bring about (3), it follows that on Friday Oscar is unable to bring about (3).

So this is true of (3): D3 requires that an omnipotent agent be able to bring about (3), and it is possible for there to be an omnipotent agent who lacks the ability to bring about (3). It follows that (3) is a counter-example to the claim that D3 provides a logically necessary condition for omnipotence.

By using the formula 'an odd number of times less than n ', and progressively replacing ' n ' with a larger number, one can construct indefinitely many states of affairs which can obtain, then fail to obtain, then obtain again, any arbitrary number of times k , but which become recalcitrant, i.e., such that they cannot obtain once again, after they have repeated k number of times, e.g., the Nile has flooded an odd number of times less than 17. An argument exactly parallel to the one given above, shows that states of affairs of these kinds give rise to further counter-examples to D3's providing a logically necessary condition for omnipotence.

If D3 is amended so that it does not require that an omnipotent agent have the ability to bring about any states of affairs of these kinds, then such states of affairs (e.g., (3)) will not be counter-examples to

the claim that the amended definition provides a logically necessary condition for omnipotence.

But how can D3 be amended in order to accomplish this aim? One natural response is to restrict the range of quantification over states of affairs in D3 to states of affairs which are *indefinitely repeatable*, viz., states of affairs which can obtain, then fail to obtain, then obtain again, *indefinitely* many times, so that there is no theoretical limit on the number of times they may repeat. For instance, the state of affairs *Socrates is walking* is indefinitely repeatable. On the other hand, (3), and similar states of affairs constructed with the help of a formula like 'an odd number of times less than n ', are not *indefinitely* repeatable, i.e., there is a theoretical limit on the number of times they can repeat.

Let us explore the adequacy of this response by restricting the range of quantification over states of affairs in D3 to those which are indefinitely repeatable. Let the definition resulting from amending D3 in this manner be called D4. Since (3), and similar states of affairs, are not indefinitely repeatable, they fall outside the range of the quantifier in D4, and D4 does not require an omnipotent agent to have the ability to bring about such states of affairs. Therefore, (3) and states of affairs like it do not provide a counter-example to the claim that D4 provides a logically necessary condition for omnipotence.

Oddly enough, the problem which certain repeatable states of affairs pose for D3, is posed for D4 by certain indefinitely repeatable states of affairs. For example, consider the following state of affairs:

- (4) An electron comes into existence at t & an electron is coming into existence & no two electrons come into existence more than two hours apart (let $t = 1:00$ P. M., E.S.T., Friday, May 12, 1978 A. D.).⁹

If all three conjuncts of (4) obtain at t , then (4) obtains at t . But a conjunctive state of affairs obtains at a time just in case all of its conjuncts obtain at that time. Consequently, if the second conjunct of (4) should fail to obtain at $t + 5$ minutes, i.e., if at $t + 5$ minutes it is false that an electron is coming into existence, then (4) fails to obtain at $t + 5$ minutes. If all three conjuncts of (4) happen to obtain at $t + 10$ minutes, then (4) obtains at $t + 10$ minutes. Thus it is possible for (4) to obtain at t , fail to obtain at $t + 5$ minutes, and obtain once again at $t + 10$ minutes; hence (4) is repeatable. More-

over, as the following argument shows, (4) is indefinitely repeatable. Suppose that the first and third conjuncts of (4) obtain. Then imagine that the second conjunct of (4) obtains, and then fails to obtain, and then obtains again at $t + 30$ minutes, then fails to obtain over the open t , then fails to obtain over the open interval ($t - t + 30$ minutes), then obtains again at $t + 30$ minutes, then fails to obtain over the open interval ($t + 30$ minutes — $t + 45$ minutes), then obtains at $t + 45$ minutes, then fails to obtain over the open interval ($t + 45$ minutes — $t + 52\frac{1}{2}$ minutes), and then obtains at $t + 52\frac{1}{2}$ minutes, ..., so that the length of the time intervals between the obtainings of the second conjunct grow progressively smaller according to the following familiar sequence: 30 minutes, 15 minutes, $7\frac{1}{2}$ minutes, $3\frac{3}{4}$ minutes, $1\frac{7}{8}$ minutes, In circumstances of this kind, (4) will repeat indefinitely many times within the closed interval [$t - t + 1$ hour].

Presumably, it is possible for some agent, at least for one who is omnipotent, to bring about (4). Since D4 requires that an omnipotent agent be able to bring about every indefinitely repeatable state of affairs which it is possible for some agent to bring about, D4 requires that an omnipotent agent be able to bring about (4).

If (4) obtains, then the third conjunct of (4) must obtain as well. But this implies that, necessarily, if (4) obtains at t , then (4) does not obtain at any time subsequent to $t + 2$ hours. Thus we shall say that (4) is recalcitrant at time t^* if (4) obtains at t and $t^* > t + 2$ hours. Once (4) becomes recalcitrant after $t + 2$ hours it is impossible for it to obtain again. Thus it is impossible for an agent acting at a time at which (4) is recalcitrant to bring about (4). But suppose that in fact (4) obtains at t , and Oscar is omnipotent at $t + 3$ hours. In this case, since (4) is recalcitrant at $t + 3$ hours, and it is impossible for an agent acting at a time at which (4) is recalcitrant to bring about (4), it follows that at $t + 3$ hours Oscar is unable to bring about (4).

So this is true of (4): D4 requires that an omnipotent agent be able to bring about (4), and it is possible for there to be an omnipotent agent who is unable to bring about (4). It follows that (4) is a counter-example to the claim that D4 provides a logically necessary condition for omnipotence.

If D4 is altered so that it does not require an omnipotent agent to have the ability to bring about (4), then (4) will not be a counter-example to the claim that the altered definition provides a logically necessary condition for omnipotence. What is needed in order to

modify D4 in this way is a repeatability condition which no state of affairs like (1), (2), (3), or (4) can satisfy. One such condition entails that a state of affairs may obtain, then fail to obtain, then obtain again, indefinitely many times *throughout all of time*. Repeatability of this kind we shall call *unrestricted repeatability*, and we define the notion of a state of affairs being unrestrictedly repeatable in the following two definitions.

- (I) The period of time t has the minimal duration of $s = \text{df.}$
 s is a state of affairs such that: (i) it is possible that s obtains at a time-period which has the duration of t , and (ii) s is necessarily such that if it obtains, then it obtains at a time-period which has at least the length of the period of time t .

For example, every period of time which is one instant in length has the minimal duration of the state of affairs that Mt. Vesuvius comes into existence, every period of time which is 1 minute in length has the minimal duration of the state of affairs that Mt. Vesuvius is erupting for one minute, and every period of time which is 5 minutes in length has the minimal duration of the state of affairs that Mt. Vesuvius is erupting for 5 minutes. In general, a state of affairs of the form $x \varphi$'s for n units of time u cannot obtain at a time-period which has a length of less than the product of $n \cdot u$.

- (II) s is unrestrictedly repeatable (UR) = *df.* s is a state of affairs such that: (i) s is noneternal, and (ii) $(n) (t_1) (t_2) (t_3) \dots (t_n) ([t_1 < t_2 < t_3 < \dots < t_n \ \& \ t_1, t_2, t_3, \dots, t_n \text{ are periods of time which have the minimal duration of } s] \rightarrow s \text{ is possibly such that: } (s \text{ obtains at } t_1, s \text{ does not obtain at } t_2, s \text{ obtains at } t_3, \dots, s \text{ obtains at } t_n \equiv n \text{ is odd}))$.⁹

States of affairs which satisfy (II) are the following: Mt. Vesuvius comes into existence; Mt. Vesuvius is erupting; The Titanic is sailing for two days; in 5 hours, a ball is rolling.¹⁰

Even though (4) can repeat indefinitely within the closed interval $[t + 2 \text{ hours}]$, (4) cannot satisfy (II) because (4) cannot repeat indefinitely throughout all of time. No state of affairs like (1) — (4) can satisfy (II).

Now let us restrict the range of quantification over states of affairs in D4 to those which are UR, and let the definition resulting from amending D4 in this way be called D5. Since (1) — (4), and states

of affairs like them, are not UR, they fall outside of the range of the quantifier in D5, and D5 does not require an omnipotent agent to have the ability to bring about such states of affairs. Consequently, (1) — (4), and states of affairs like them, do not provide a counter-example to the claim that D5 provides a logically necessary condition for omnipotence.

IV

Because D5 employs the concept of unrestricted repeatability, it provides the nucleus of a viable analysis of omnipotence. However, a few loose ends remain: there are further counter-examples to the claim that D5 is an adequate analysis of omnipotence. In this section we shall further utilize the concept of unrestricted repeatability to construct a definition based on D5 which is completely satisfactory.

Consider the following conjunctive state of affairs:

- (5) a ball is moving & \sim (Oscar brings about something at some time during his life).

In (5), let 'Oscar' designate an omnipotent agent who has just come into existence. Let the first conjunct of (5) be called p , and the second conjunct of (5) be called q . p is UR, but q is not UR. Since p is UR, and p is a conjunct of (5), and q is contingent, it follows that (5) is also UR.

It is possible for some agent to bring about (5). For example, possibly, some agent other than Oscar can bring about (5) by moving a ball and killing Oscar in his crib before he ever brings about anything. Since D5 requires that an omnipotent agent have the ability to bring about every unrestrictedly repeatable state of affairs which it is possible for some agent to bring about, it follows that D5 requires our omnipotent agent Oscar to have the ability to bring about (5).

Oscar is able to bring about p . However, it is necessarily true that if Oscar brings about something, then q does not obtain. This has two consequences: (i) it is logically impossible for Oscar to bring about q , and (ii) it is logically impossible for both q to obtain and Oscar to bring about p . (i) entails that Oscar is unable to bring about q . (i) and (ii) taken together entail that it is impossible for Oscar to bring

bring about (5), and since it is possible for there to be an omnipotent agent, Oscar, who lacks the ability to bring about (5), it follows that (5) is a counter-example to the claim that D5 provides a logically necessary condition for omnipotence.

Since one of the conjuncts of (5), namely q , is not UR, by utilizing the concept of unrestricted repeatability, it should be possible to formulate a condition which excludes (5), and similar states of affairs, from the range of our quantifier. The fact that (5) is a *complex* state of affairs¹¹ which contains a non-UR component, q , suggests the following condition:

- (A) s is UR & (s is a complex state of affairs \rightarrow each of the components of s is UR).

(5), and states of affairs like it, do not satisfy condition (A).¹²

Now let us restrict the range of quantification over states of affairs in D5 to those which satisfy condition (A), and let the definition resulting from amending D5 in this way be called D6. Since (1) — (5), and states of affairs like them, either are not UR or have as components states of affairs which are not UR, they fall outside the range of the quantifier in D6. Therefore, D6 does not require that an omnipotent agent have the ability to bring about such states of affairs. Consequently, (1) — (5), and states of affairs like them, do not provide counter-examples to the claim that D6 provides a logically necessary condition for omnipotence.

As we have seen, an omnipotent agent, Oscar, is unable to bring about q . q is not UR; and thus D6 does not require our omnipotent agent Oscar to have the ability to bring about q . However, consider the following state of affairs:

- (6) \sim (Oscar is bringing about something).

(6) is UR, and does not have as a component a state of affairs which is not UR. Thus D6 requires an omnipotent agent to have the ability to bring about (6). However, interestingly enough, (6), unlike q , is such that Oscar is able to bring it about. For example, Oscar has the ability to bring it about that he is inactive, resting, or in a state of repose (one way he could bring this about is by drinking a sleeping potion). Hence, Oscar is able to bring about (6). Similarly, Oscar has the ability to bring about the following conjunctive state of affairs:

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(7) a ball is moving & \sim (Oscar is bringing about something).

For example, at t Oscar can bring it about that (7) obtains at $t + 3$ minutes by at t giving a ball a push hard enough to keep it rolling for 3 minutes, and at t taking a sleeping potion which ensures that in 3 minutes he is inactive.

An omnipotent agent lacks the ability to bring about a state of affairs, s , only if either s is not UR, or s has as a component a state of affairs which is not UR, or s is impossible for any agent to bring about.

V

In order to arrive at the analysis of omnipotence which we shall adopt, D6 requires one final modification. Consider the following state of affairs:

(8) Mt. Vesuvius erupts forever after.¹⁵

Intuitively, if an agent is omnipotent, then he has the ability to bring about (8). But since (8) is not UR, it falls outside the range of the quantifier in D6. Thus D6 has the following defect: it does not require that an omnipotent agent have the ability to bring about (8), or states of affairs like it. States of affairs like (8) provide the only sort of counter-example to the claim that D6 provides a correct analysis of omnipotence. It is necessary to amend D6 in order to remedy this defect. Our last definition, D7, includes this emendation.

D7: x is omnipotent at $t =$ df. (s) (it is possible for some agent to bring about $s \rightarrow$ at t x has the ability to bring about s).

In D7, x ranges over agents, and s over states of affairs which satisfy the following condition:

(i) s is UR & (s is a complex state of affairs \rightarrow each of the components of s is UR), or (ii) s is of the form 'p forever after', where p is a state of affairs which satisfies (i).

D7 requires that an omnipotent agent be able to bring about (8), and states of affairs like it. We contend that D7 provides a correct and consistent analysis of the concept of omnipotence.

VI

A critic might raise the following sort of objection to our claim that D7 provides a logically necessary and sufficient condition for omnipotence: "Surely, (i) an agent is omnipotent on July 12, 1978 A.D. only if he is then able to bring about the following state of affairs:

(9) Mt. Vesuvius erupts on July 15, 1978 A.D.

But, clearly, (ii) (9) is not UR. Furthermore, (iii) since the quantifier in D7 ranges over states of affairs which are UR, D7 does not require that an agent who is omnipotent on July 12, 1978 A.D. have the ability to bring about (9). Hence, (iv) an agent who on July 12, 1978 A.D. lacks the ability to bring about (9) can satisfy D7. But, obviously, (v) such an agent is too limited in his abilities to plausibly be said to be omnipotent. Therefore, (vi) an agent can satisfy D7 and fail to be omnipotent, and D7 does not provide a logically sufficient condition for omnipotence."

This objection is unsound because premise (iii) is false. Despite the fact that (9) does not fall within the range of the quantifier in D7, D7 *does* require that an agent who is omnipotent on July 12, 1978 A.D. have the ability to bring about (9).

Once we realize that it is a fact that an agent's bringing about a state of affairs can always be "cashed out" in terms of his bringing about a state of affairs which satisfies the antecedent of D7, it becomes apparent that D7 does indeed require this. Put in general terms, this fact may be expressed in the following principle:

Necessarily, for any state of affairs, *s*, if an agent, *A*, brings about *s*, then either *s* satisfies the antecedent of D7, or *A* brings about *s* by bringing about *q*, where *q* is a state of affairs which satisfies the antecedent of D7.

We have already conceded that an omnipotent agent, *A*, acting prior to July 15, 1978 A.D. has the ability to bring about (9). Hence, we are committed to saying that if *A* brings about (9), he brings it about by bringing about some state of affairs which satisfies the antecedent of D7 — and, of course, D7 implies that *A* has the ability to bring about a state of affairs of the latter sort. For example, on July 12,

1978 A.D. A can bring about (9) by bringing it about that the following UR state of affairs obtains:

(10) In 3 days, Mt. Vesuvius is erupting.

A similar procedure for cashing out the bringing about of *any* dated state of affairs in terms of the bringing about of a state of affairs which is UR is always available. Furthermore, it should be clear from the cashing out of the bringing about of (9) in terms of the bringing about of (10), that for *any* time t^* , prior to July 15, 1978 A.D., D7 requires that if A is omnipotent at t^* , then A is able, at t^* , to bring about (9) by bringing about an UR state of affairs of the form, 'In n-units of time, Mt. Vesuvius is erupting', where n-units of time is the temporal distance between t^* and July 15, 1978 A.D.

It is a necessary truth that if A, on July 12, 1978 A.D., is able to bring about (10), then A, on July 12, 1978 A.D., is able to bring about (9). Since (10) is UR, it satisfies the antecedent of D7, and an agent who is omnipotent on July 12, 1978 A.D. is required by D7 to have the ability to bring about (10). Consequently, D7 requires an agent omnipotent on July 12, 1978 A.D. to be able to bring about (9). Thus the objection to D7 based on (9) stands refuted. Generally, D7 requires that if an agent, A, is omnipotent at a time t^* , and t^* is prior to the dates of certain dated states of affairs, then A is able, at t^* , to bring about these dated states of affairs.

Analogously, A can bring about the following non-UR state of affairs:

(11) Mt. Vesuvius erupts for the first time,
by bringing it about that

(12) Mt. Vesuvius is erupting,

when this eruption is Vesuvius' first. It is a necessary truth that if A has the ability to bring about (12), and he has this ability at some time, t^* , at which (11) is not recalcitrant, then at t^* A has the ability to bring about (11). Since (12) satisfies the antecedent of D7, D7 requires that an omnipotent agent be able to bring about (12). Therefore, D7 requires that if an agent, A, is omnipotent at a time t^* at which (11) is not recalcitrant, then A is able, at t^* , to bring about (11). A similar procedure for cashing out the bringing about of other non-UR states of affairs like (2), (3), and (4) in terms of the

bringing about of a state of affairs which is UR is always available. In general, D7 requires that if an agent, A, is omnipotent at a time t^* , and certain states of affairs like (2), (3), or (4) are not recalcitrant at t^* , then A is able, at t^* , to bring about these states of affairs like (2), (3), or (4).

In conclusion, if an agent has the abilities to bring about every state of affairs which satisfies the antecedent of D7, then his abilities are not limited in any way which is incompatible with his being omnipotent.

VII

What, it might be asked, of the ancient riddle of the stone? Can an omnipotent agent bring it about that there is a massive stone which he cannot move? We think that this question has a straightforward and simple answer, and that it raises no *a priori* objection to the contention that the concept of omnipotence is coherent.

Clearly, certain non-omnipotent agents lack the ability to move a massive stone. Thus if an omnipotent agent can bring it about that he is non-omnipotent, then he can bring it about that he lacks the ability to move a massive stone by bringing it about that he is such a non-omnipotent agent. On the other hand, if an omnipotent agent cannot bring it about that he is non-omnipotent, then there cannot be a stone so massive that he cannot move it.

For example, if Oscar has the property of omnipotence, but he does not have this property necessarily, then our analysis of omnipotence implies that Oscar can bring it about that he is non-omnipotent. For if Oscar is accidentally omnipotent, then the state of affairs that *Oscar is non-omnipotent* is UR and does not have as a component a state of affairs which is not UR. Since Oscar can bring it about that he is non-omnipotent, he can also bring it about that: Oscar is non-omnipotent & there is a stone too massive for Oscar to move.

Let 'Yahweh' be a proper name of an omnipotent agent who, if he exists, has the property of omnipotence necessarily. Since Yahweh is necessarily omnipotent, the state of affairs *Yahweh is non-omnipotent* is an impossible state of affairs. But an impossible state of affairs cannot be brought about by any agent (and D7 does not require Yahweh to be able to bring about any impossible states of affairs). D7, and

any plausible analysis of omnipotence, implies that, necessarily, if there is a stone too massive for Yahweh to move, then Yahweh is non-omnipotent. Since the consequent of this conditional is impossible, so is its antecedent. And no agent, Yahweh included, is able to bring about either of these impossible states of affairs. Thus since Yahweh cannot bring it about that he is non-omnipotent, Yahweh cannot bring it about that there is a stone so massive that he cannot move it.

In conclusion, it seems that the question of whether an omnipotent agent has the ability to bring it about that he is non-omnipotent can always be given a consistent set of answers, depending on whether the omnipotent agent in question is necessarily or contingently omnipotent. Because of this, the riddle of the stone can be solved in a way compatible with our definition of omnipotence.¹⁴

NOTES

1. See Richard La Croix, "The Impossibility of Defining Omnipotence," *Philosophical Studies* 32 (1977).
2. See George Mavrodes, "Defining Omnipotence," *Philosophical Studies* 32 (1977), and Richard Swinburne, "Omnipotence," *American Philosophical Quarterly* 10 (1973). For counter-examples to these definitions see: Joshua Hoffman, "Mavrodes on Defining Omnipotence," *Philosophical Studies*, forthcoming; and Gary Rosenkrantz and Joshua Hoffman, "Omnipotence, Agency, and Time," presented at the 1978 Western Division Meeting of the American Philosophical Association, respectively.
3. See Roderick Chisholm, *Person and Object: A Metaphysical Study* (LaSalle: Open Court, 1976), ch. 4.
4. Compare Mavrodes, *op. cit.* Mavrodes attempts to define omnipotence in terms of an agent being able to bring it about that a proposition is *satisfied* by an event.
5. For example, see Mavrodes, *op. cit.*
6. We employ the notions of broadly logical *de dicto* necessity and possibility in the customary way, and when it is appropriate we do not hesitate to make use of *de re* logical modalities, e.g., *de re* necessity. The concept of *de dicto* necessity enables one to say of a proposition that it is necessarily true, or of a state of affairs that it is a necessary one. On the other hand, the concept of *de re* necessity permits one to say of an item that it has a certain property necessarily or, equivalently, that it is necessarily such that it has a certain property (where this means that it is impossible for the item under discussion to exist and lack the property in question).
7. A similar consequence of the way in which the concepts of time and agency are understood in our ordinary conceptual scheme is the following: if there are 'past-tense' states of affairs, e.g., The Nile *was* flooded yesterday, The sun *shone* yesterday, etc., then such states of affairs are impossible for any agent to bring about.

8. The idea for constructing a state of affairs of this kind is due to John King.
9. Where n ranges over all natural numbers.
10. John Locke claimed that a thing cannot have two beginnings of existence. This claim implies, contrary to what we have asserted, that the state of affairs *Mt. Vesuvius is coming into existence* is not UR. However, as far as we know, there is no convincing argument which supports Locke's contention. And we simply fail to see any logical contradiction, incoherence, or absurdity in the supposition that Mt. Vesuvius goes in and out of existence indefinitely many times. In light of this, we shall assume that the state of affairs *Mt. Vesuvius is coming into existence* is UR. Generally, a contingent state of affairs of the form '*a is coming into existence*' is UR.
11. Intuitively, a *complex* state of affairs is any state of affairs which is either constructible out of other states of affairs by use of the logical apparatus of first-order quantification theory enriched with whatever modalities one chooses to employ, or else analyzable into states of affairs which are so constructible. The *components* of a complex state of affairs, s , are those states of affairs out of which s , or s 's analysis, is constructible. For example, the state of affairs, Oscar is tall and strong, is either identical with, or analyzable into, the following conjunctive state of affairs: Oscar is tall & Oscar is strong. Similarly, the state of affairs, Oscar is not tall, is either identical with, or analyzable into, the state of affairs, Oscar exists & \sim (Oscar is tall).
12. A state of affairs such as *Oscar never brings about anything during his life*, is a counterexample to (D5). This state of affairs is either identical with or analyzable into the conjunctive state of affairs, Oscar exists & \sim (Oscar brings about anything during his life). This latter state of affairs is UR, possibly brought about by some agent, but not possibly brought about by Oscar. However, this state of affairs is a complex one of whose components, its second conjunct, is not UR. Thus, it does not satisfy condition (A).
13. This example is due to Phil Quinn.
14. We would like to thank George Mavrodes, John King, Phil Quinn, and Richard La Croix for their helpful comments.