

# **Divinity and Maximal Greatness**

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# 1 Introduction

## **Aim of this work**

One of the aims of philosophy is to analyse concepts. In particular, one of the aims of philosophy of religion is to analyse religious concepts. The most important concepts of the three great Western religions – Judaism, Christianity, and Islam – are those concepts clustered as a family round the concept of God. Other concepts in this family are the concept of the property of being divine and the concept of theism. In this work I shall try to analyse the concept of *divinity*. This book is within the tradition of perfect-being theology. Perfect-being theology claims that the key to analysing concepts of this family lies in another family of concepts, clustered around the concept of *perfection*. Among other concepts in this family is that of *maximal greatness*, or being as great as possible. The claim of perfect-being theology may be made explicit in various ways, depending on whether it is construed as a metaphysical or as a semantic thesis, and which precise concepts or words we are taking as analysandum and analysans. Usually it is framed in terms of the word ‘God’ or the being God. I shall, however, not discuss the more common versions, first, because I wish to avoid the ambiguity of the word ‘God’, which may be taken as a name for a being or as a definite description or as an indefinite description or as a title-term, and, secondly, because I wish not to seem to presume that there is a divine being, or even that it is possible that there be a divine being, and, thirdly, because I do not wish to seem to presume that there is, or could be, at most one divine being.

## ***Different possible theses***

So, the claim may be construed:

- (I) as a semantic thesis,
  - (a) that the meaning of the word ‘divinity’ is *absolute perfection*,<sup>1</sup>
  - (b) that the meaning of the word ‘divinity’ is *maximal greatness*,<sup>2</sup>

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1 Italicization of a phrase is meant to represent the meaning of that phrase (cf. Alston 1964: 11).

2 The upholder of either Ia or Ib should not be taken to be committed to the view that *every* occurrence of the word ‘divinity’ means *absolute perfection* or *maximal greatness*, as appropriate. If one talks about ‘the academic subject, divinity’ one may mean no more than that the intended object of the

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(II) as a metaphysical thesis,

- (a) that a necessary and sufficient condition for being divine is being absolutely perfect,<sup>3</sup>
- (b) that a necessary and sufficient condition for being divine is being maximally great.

To me it seems plausible that each semantic thesis will imply the corresponding metaphysical thesis, but not conversely.

### *The semantic theses*

I shall not defend either of the semantic theses in this work, since each is difficult to prove. Let us consider their advantages and disadvantages. On the *semantic* version, 'divinity' is defined as meaning *maximal greatness* or *absolute perfection*. Suppose we then define 'a theist' as *someone that believes that there is at least one divine being*. This is a good definition, since there are many radical theists, such as process theists or feminist theists, that are excluded by the usual definitions of 'a theist'. For instance, if one defines 'a theist' as meaning *someone who believes that there exists a being having pure, limitless, intentional power* (cf. Swinburne 1994: 151), then somebody who calls himself or herself 'a theist', but denies that a being of limitless power exists, will not be a theist, yet such a person might well think that there is an absolutely perfect or maximally great being; he or she might think merely either that limitless power is not a great-making property or that the maximally great being is maximally powerful but not limitlessly so. I submit that this inclusiveness is an advantage of this sort of perfect-being theology (i.e. the definition of 'a theist' as *someone who believes that there exists a maximally great being* or as *someone that believes that there exists an absolutely perfect being*). Furthermore, I know of no other attempted definition of 'divinity' or 'theism' etc. that has such broad inclusive power. On the other hand, a difficult enduring problem with *semantic* perfect-being theology is that someone that calls himself or herself 'a theist', but denies that there is a maximally great being, is not counted as a theist. Such a person might deny that it makes sense to talk about greatness *simpliciter*: i.e., he or she might claim that if one says that  $x$  is greater than  $y$ , one is speaking of  $x$ 's being a greater  $F$  than  $y$  for some sortal  $F$ . This is indeed a problem for the *semantic* version of perfect-being theology, but it is not a problem for the *metaphysical*

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academic study is divine (i.e. absolutely perfect or maximally great, as appropriate). One does not mean that the academic discipline itself is absolutely perfect or maximally great.

- 3 Even here we are not free from controversy: some will see a difference between asserting, on the one hand, that divinity is the same property as absolute perfection or maximal greatness, and, on the other hand, asserting that being absolutely perfect or maximally great is a necessary and sufficient condition for being divine. I am inclined to agree that there is a difference: it seems to me that there is a difference between the property of being the only even prime number and the property of being both the half and the square root of a single number, though these two properties share a single extension. My problem is that what leads me to this inclination also leads me to the inclination that there is a difference between divinity, on the one hand, and each of absolute perfection and maximal greatness, on the other. So I restrict myself to defending the thesis that each is a necessary condition for the other.

version of perfect-being theology, because that allows for the property of divinity to be conceptualized in any number of actual ways. Furthermore, although I do not want to get caught up in independent questions in the philosophy of language, it seems plausible to me that to claim that 'divinity' means *absolute perfection* or *maximal greatness* would involve a commitment to certain psychological claims, e.g. that most people using the word 'divinity' intended one to think of *absolute perfection* or *maximal greatness*, or, at least, that a certain number of competent language users did. I think that these psychological claims are difficult to defend, however, though I myself find them plausible. Instead, I shall be interested in the metaphysical theses.

### *The metaphysical theses*

Which of the metaphysical theses shall I be defending? I have left the options relatively broad: to speak merely of necessary and sufficient conditions leaves it open as to whether the property of being divine is identical with the property of being maximally great (or the property of being absolutely perfect) or whether it is merely co-extensive with it.<sup>4</sup> I shall now turn to the analyses. I offered two alternative analyses of the analysandum: the first in terms of absolute perfection, perhaps historically the more important, and the latter in terms of maximal greatness, a concept used a good deal by contemporary analytic philosophers of religion. The difference between these two is that absolute perfection is the conjunction of great-making properties so as to give an overall level of greatness higher than every other level, whether or not that combination is actually possible; in brief, absolute perfection is the property of being the greatest being. On the other hand, I take maximal greatness to be the property of being a *possible* being than which there is no *possible* greater one; that is, of having the class of properties that gives the highest *possible* value. The difference can best be brought out by means of an example. Suppose that being able to do every action ('omnipotence', as traditionally defined) is a property that contributes to absolute perfection. Suppose further that being unable to do an evil action ('impeccability' as traditionally defined) is also a property that contributes to absolute perfection. It is not possible that at a given time something could possess both of these properties. It follows that it is not possible that at a given time something could be absolutely perfect. Maximal greatness, however, means the possession of as many valuable properties as compossible, *ceteris paribus*. Hence we have here two natural candidates for contributing to maximal greatness:

- (i) being omnipotent (as traditionally defined), but not being impeccable (as traditionally defined);
- (ii) being impeccable (as traditionally defined), but not being omnipotent (as traditionally defined).

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4 One property is co-extensive with another if, necessarily, everything that possesses one of them possesses the other.

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There is a third natural option here:

- (iii) being omnipotent (as traditionally defined) and being impeccable (as traditionally defined);

this is not a candidate for maximal greatness, since it is not a possible conjunction.<sup>5</sup> It is also possible that the less natural option, expressed by the following, should contribute more to greatness than that expressed by i or by ii:

- (iv) being neither omnipotent nor impeccable.<sup>6</sup>

For instance, if possession of the property of being omnipotent implied possession of the property of being really quite peccable,<sup>7</sup> and if possession of the property of being impeccable implied possession of the property of being really quite impotent, then it might be better to be nearly omnipotent and nearly impeccable rather than wholly one and not very much the other. The discovery of which of the conditions expressed by i, ii and iv confers the most greatness and, hence, which actually makes for maximal greatness, *ceteris paribus*, is not a trivial matter, but the three mentioned faiths, insofar as they have addressed the problem at all, have usually held that it is ii.

It might seem as if I have defined maximal greatness in such a way that it is by definition possibly exemplified. To see that this is not so, consider the question of whether there is a maximally great natural number.<sup>8</sup> For every natural number there is a greater natural number, hence there is no maximally great natural number. Analogously, there could fail to be a maximally great being, on the assumption that there is such a relation as *being greater than*, if and only if for every possible being there is a greater. I hope to describe the notion of maximal greatness in this work in such a way that it seems possible that there be at least one being than which there is no greater, i.e. that there be a maximally great being.

Why should anybody believe that this concept of maximal greatness holds the key to that of the divine? Well, I think almost everyone would assent to the propositions expressed by the following sentences:

- (1.1) Every divine being is absolutely perfect.

or:

- (1.2) Every divine being is maximally great.

and:

- (1.3) Nothing could be greater than a divine being.

There is scriptural justification for this general line of thought: ‘Great is the Lord and most worthy of praise; his greatness no-one can fathom’,<sup>9</sup> ‘Praise him

5 I try later to show that omnipotence is in fact compatible with impeccability (as traditionally defined), but that the above understanding of ‘omnipotence’ will have to be revised.

6 I am grateful to James Heather for forcing me to take this option seriously.

7 It may be objected that peccability does not come in degrees, but we can imagine various beings that can do evil in more or fewer ways.

8 Here I am using ‘great’ in the traditional mathematical sense, not the theological sense.

9 Psalm 145: 3 (Holy Bible, New International Version, London: Hodder and Stoughton, 1984). Unless otherwise stated, all quotations from the Bible are taken from this edition.

for his surpassing greatness'.<sup>10</sup> As previously noted, there are some that would deny that there is such a general property as that of greatness *simpliciter*. In this work I attempt to convince them otherwise, by providing various examples and thought experiments.

## Rival theories

Before going on to expound the metaphysical thesis that a being is divine if and only if he is maximally great, I shall briefly canvass some other options.<sup>11</sup>

### *Creator of all*

Another natural view is that a being is divine if and only if he is the creator of everything else, or, more weakly, if and only if he is the creator of every other concrete particular. This idea is often linked with the idea that a being is divine if and only if he exercises providential care over every other concrete particular. Aquinas writes:

Because therefore God is not known to us in His nature, but is made known to use from His operations or effects, we can name Him from these, as said in a 1; hence this name *God* is a name of operation so far as relates to the source of its meaning. For this name is imposed from His universal providence over all things; since all who speak of God intend to name God as exercising providence over all [...] But taken from this operation, this name *God* is imposed to signify the divine nature.

(Aquinas 1920: Ia.Q13.a8.respondeo)<sup>12</sup>

It is plausible that every conceptually possible divine being is also creator (directly or indirectly) of every other concrete particular, and that every conceptually possible divine being exercises providential care over every other concrete particular.<sup>13</sup> I do not agree, however, that the converse is true in either case. I deny that every conceptually possible being that is creator of every other concrete particular is divine, and I deny that every conceptually possible being that exercises providential care over every other concrete particular is divine. This is because, whether or not it is metaphysically possible,<sup>14</sup> it certainly seems conceptually possible that

10 Psalm 150: 2.

11 Here and throughout this work I follow tradition in using masculine pronouns to refer to divine beings. I do not, of course, mean to commit myself thereby to the belief that any divine being is male.

12 I am grateful to an anonymous Routledge referee for directing me to this text.

13 There is a problem here over the apparent possibility of there being more than one divine being. According to the traditional Christian doctrine of the Trinity (which I accept) there are three divine beings, each of whom is (arguably) co-creator of everything non-divine, but none of whom is created by the others. The problem is that the articulation of this truth depends on a different notion of divinity from *being the creator of everything else*, since it is not true that the Father is creator of everything else, since he did not create the Son. We have to say that he is the creator of everything non-divine, which leaves us asking what 'non-divine' means.

14 See below for a discussion of the different sorts of necessity and possibility.

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there be a being that created every other concrete particular and yet was not divine. The being might, for example, be very powerful, very knowledgeable, and very kind, but not all-powerful, all-knowing, and perfectly good. In that case, it is conceptually possible that there be a greater being than he, and, therefore, he would not be divine. Similarly, whether or not it is metaphysically possible, it is conceptually possible that there be a being that exercised providential control over every other concrete particular and yet was not divine. Again, for example, the being's powers might fall just short of omnipotence, omniscience, and perfect goodness. As before, it is conceptually possible that there be a greater being than he, and, therefore, he would not be divine. It follows that the concept of divinity is not equivalent to the concept of universal creation or the concept of universal providence, since some beings fall under the latter concepts that do not fall under the concept of divinity. It follows that neither the concept of universal creation nor the concept of universal providence suffices to analyse the concept of divinity.<sup>15</sup>

### ***Being itself***

Another suggestion for analysing the concept of divinity is to suggest that a being is divine if and only if he is 'being itself' or 'the ground of all being'. The idea that a being is divine if and only if he is being itself can also be derived from Aquinas:

*I answer that*, This name he who is, is most properly applied to God, for three reasons: – First, because of its signification. For it does not signify form, but simply existence itself. Hence since the existence of God is His essence itself, which can be said of no other (Q3.a4), it is clear that among other names this one specially denominates God, for everything is denominated by its form. Secondly, on account of its universality. [...] Now by any other name some mode of substance is determined, whereas this name he who is, determines no mode of being, but is indeterminate to all; and therefore it denominates the *infinite ocean of substance*. Thirdly, from its consignification, for it signifies present existence; and this above all properly applies to God, whose existence knows not past or future.

(Aquinas 1920: Ia.q13.a11.respondeo [italics original])

I shall discuss suggestions arising from this in greater depth below, when I tackle the doctrine of divine simplicity, but let me merely say for now that the suggestion that every divine being is being itself seems to me clearly to imply the claim that every divine being is an abstract object of a certain kind, a property, and that this claim seems to me clearly false. It seems to me clearly possible that there be a greater being than an abstract object; indeed, every concrete being seems to me greater than every abstract object.

15 Richard Swinburne put it to me (personal communication) that an advantage of an analysis of the concept of divinity in terms of the concept *being the creator of every (non-divine) concrete particular* rather than in terms of maximal greatness is that it is much easier to argue that the concept *being the creator of every (non-divine) concrete particular* is instantiated. This may well be right, but I think that it is not necessary to be rational that one have arguments for one's belief in the instantiation of the concept of maximal greatness (cf. Plantinga 2000).



As for the suggestion that every divine being is the ‘ground of all being’, it is often hard to see how or whether this is intended to be different in meaning from ‘being itself’. I certainly accept that every divine being is the ground of all being in the sense that every divine being is a concrete particular that is causally responsible for the existence of every non-divine being. I reject, however, any understanding of ‘ground of all being’ that has the implication that every divine being is a merely abstract entity. Further, I suspect that every reasonable interpretation of the phrase ‘ground of all being’ that does not have this implication boils down to the sense that I do accept.

### ***Scripturalism***

It is also sometimes suggested by adherents of a particular religion that one should get one’s concept of the divine from that religion’s sacred text alone. For example, some Christians claim that one’s concept of the divine should be drawn entirely from the Bible. The problem with this line is that the Bible never explicitly defines (the Greek or Hebrew equivalents of) any of the terms ‘God’, ‘divine’, and ‘divinity’. It is sometimes responded that the Bible implicitly defines these terms. I think that, in one sense, this is quite right – some verses of Scripture do seem to imply that every divine being is maximally great: ‘Great is the Lord, and most worthy of praise’ (Psalm 48: 1) and “‘To whom will you compare me? Or who is my equal?’” says the Holy One’ (Isaiah 40: 25). The problem is that Scripture does not seem quite so clearly to affirm the converse, that every maximally great being is divine. In addition, one must of course distinguish between the properties ascribed in Scripture to a divine being that are not part of the divine nature (such as, for example, the property of having created Adam, and the property of having called Moses), and those ascribed to a divine being that *are* part of the divine nature (such as, for example, omnipotence, omniscience, and perfect goodness). The problem is that one must distinguish these using reason and intuition; Scripture itself does not distinguish them for us. So, I think that perfect-being theology offers the best hope for analysing the concept of divinity.

### **Greatness**

What, then, is greatness? Technically speaking, the relation of *being greater than* is a strict partial order<sup>16</sup> on the class of all possible beings.<sup>17</sup> It is a *strict partial*

16 Also known as a ‘sharp’ or ‘strong’ partial order.

17 Some people object to defining relations on proper classes (i.e. classes that are not sets). I note first that I am not intending to express any ontological commitment when I speak of the ‘class’ of all possible beings. Secondly, if one were to allow only *concreta* as possible beings (i.e. if one ruled out *abstracta*), which I am not minded to do, then it might well be that the class of all possible beings would be a set as well. (This would depend on one’s views on transworld identity.) Thirdly, although if one lets in *abstracta* one will not have a set of all possible beings, one should just construe my talk of the relation of *x*’s *being greater than y* as defining a linguistic expression, briefly ‘ $y < x$ ’, and outlining the conditions for its truth.

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*order* because it is a binary relation that satisfies the following two conditions for every three possible individuals,  $x$ ,  $y$ , and  $z$ :

**asymmetry:** if  $x$  is greater than  $y$  then  $y$  is not greater than  $x$ ;<sup>18</sup>

**transitivity:** if  $x$  is greater than  $y$ , and  $y$  is greater than  $z$ , then  $x$  is greater than  $z$ .

It is not a strict *total* order because it fails to satisfy the following condition:

**trichotomy:** exactly one of the conditions expressed by i–iii holds:

- (i)  $x$  is greater than  $y$ ;
- (ii)  $y$  is greater than  $x$ ;
- (iii)  $x$  is the same individual as  $y$ .

Clearly at most one of the conditions expressed by i–iii holds, but it may be that none of the conditions expressed by i–iii holds. This is to say that it may be that two distinct possible individuals are incommensurable, or are equally great. This is intuitively correct: it may be that neither of Beethoven and Rembrandt is greater than the other, and that neither of Einstein and Shakespeare is greater than the other. The ordered class does, I shall argue, have one further property, however: it has at least one maximal member. A member,  $a$ , of a class is *maximal*, if and only if there is no member greater than  $a$ . The claim of *metaphysical* perfect being theology is that any maximal member is divine, and any divine being is *maximal with respect to greatness*, or ‘*maximally great*’, for short.<sup>19</sup> I have deliberately not made it clear whether the class has a greatest member. A possible individual,  $a$ , is *the greatest member* of a class if and only if  $a$  is greater than every other member of the class. There can be at most one greatest member of any given class, since if there were more than one greatest member, each would be greater than each of the others, which would violate the *asymmetry* requirement above. The reason I have left this unclear is that here different theories can use the metaphysics and logical structure of perfect-being theology. For instance, one might say that every divine being is maximally great and, moreover, that every divine being is greater than every other possible individual, therefore there can be at most one divine being, who is the greatest being. Or one might want to say that there is more than one divine being, and that each is equally great as each of the others, and that therefore there is no greatest being, merely several maximally great beings. This is why I shall not discuss explicitly the question of whether there is a greatest possible being, but merely the question of whether there is a maximally great being.

When I say that the relation *being greater than* is a relation on the class of all possible beings, by ‘beings’ I mean *entities* in the most general sense of ‘entities’, which would include abstract objects (such as properties). This proposal would, then, include people as theists that think that possibly, at least, a divine being is somehow abstract, and that the property of being abstract is greater than or as

18 This condition is called ‘anti-symmetry’ by some. Compare Machover (1996: Definition 2.3.7.(i)). What I call ‘anti-symmetry’ Machover calls ‘weak anti-symmetry’.

19 By  $a$ ’s being ‘maximal with respect to’ a particular property I mean that nothing possesses that property more than  $a$ . So to say that  $a$  is ‘maximal with respect to greatness’ is to say that nothing is greater than  $a$ .

great as the property of being concrete,<sup>20</sup> since these people could assent to the proposition that every divine being is the greatest possible being or a maximally great being. It would also be in keeping with Anselm, the first Christian theologian to make detailed use of the idea of greatness in relation to the divine, who explicitly compares, with respect to greatness, the divine being himself and the idea of a divine being, concluding that the first is greater than the second (Anselm of Canterbury 1995: 99–100).

I do not have to legislate on transworld identity. I do not have to pronounce on whether a being, *a*, in some world, *W*, and a being, *b*, in some different world, *W'*, are the same being in different possible worlds or different beings, if, for example, they are exactly alike apart from the fact that *a* creates Adam and *b* creates a different human instead. All that matters is that each is divine if and only if he is maximally great. This is another advantage to discussing whether there is a maximally great being rather than a greatest being: in the latter case someone might claim that *a* and *b* are distinct possible beings, yet neither is greater than the other, hence there is no greatest possible being. I shall not be restricting my attention to beings at any particular index, such as a time, place, or possible world, however. This allows me to consider omnitemporal properties and essential properties. So, I may say, for instance, that a being that is powerful only some of the time is not as great as one that is powerful all the time, and a being that is essentially morally good is greater than one that is only contingently morally good. If the reader prefers, he or she may think of beings at a particular index, as long as he or she allows them to have properties expressed by locutions of the form ‘*F*-at-a-different-index’.<sup>21</sup>

### ***Great-making properties***

Maximal greatness supervenes on other properties. I shall appeal to several thought experiments and examples to show that we ordinarily think that properties such as power, knowledge, goodness, beauty, life, etc., are great-making properties. A property, *F*, is *great-making* if and only if an object, *a*, that has *F* is greater than every object, *b*, like *a* in all particulars save that *b* lacks *F* and any properties whose possession is implied by the possession of *F*. I write ‘every’ because there may be many such beings rather than a single one that is like *a* in all particulars save in the lacking of *F* and any properties whose possession is implied by the possession of *F*, and it is necessary for *F* to be a great-making property that its possession make its possessor greater than every other such being. For example, one might consider whether the property of knowing exactly a thousand propositions was a great-making property.<sup>22</sup> But clearly it is not: suppose that *a* knows exactly a

20 Or, while being less great in itself, its possession implies the possession of properties that are greater than the ones whose possession is implied by possession of the property of being concrete.

21 I use ‘*F*’ and ‘*G*’ as variables ranging over properties, following popular usage. Quine, who does not believe in properties as distinct from sets, dislikes this usage since it tends to promote confusion with ‘*F*’ and ‘*G*’ as schematic letters. I have given in to the popular usage, but am careful not to confuse the variables I use with schematic letters. See, e.g., Willard Van Orman Quine, ‘The Variable’, in Parikh (1975), reprinted in Quine (1976 : 272–282).

22 I owe this point to James Heather, to whom I am grateful.

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thousand propositions and consider a being that is exactly like *a*, but does not know exactly a thousand propositions. How many propositions does this being know? Clearly the answer could be ‘more than a thousand’, and it could also be ‘fewer than a thousand’. But while *a* will be greater than an otherwise exactly similar being, *b*, that knows fewer than a thousand propositions, *a* will be less great than an otherwise exactly similar being, *c*, that knows more than a thousand propositions. So, the property of knowing exactly a thousand propositions is not a great-making property.

One would expect a maximally great being to have every great-making property, *ceteris paribus*. Anselm explains the concept of a great-making property by taking the example of wisdom:

It is better to be wise than not-wise. For although a just person who is not wise seems to be better than a wise person who is not just, it is not better in an unqualified sense to be not-wise than to be wise. Indeed, whatever is not-wise in an unqualified sense, insofar as it is not-wise, is less than what is wise, since everything that is not-wise would be better if it were wise. Similarly, it is in every respect better to be true than not, that is, than not-true, and just than not-just, and living than not-living.

(Anselm of Canterbury 1995: 28)

Some great-making properties are scaling, others are not. A property, *F*, is *scaling* or *degreed* if and only if it is possible that each of two distinct entities should be *F* and yet one should have a greater degree or level of *F* than the other. Another way of looking at this is to say that with each scaling property, *F*, is associated a relation, which will be expressed by a locution of the form ‘*possesses more of F than*’. Thus the property of *being great* itself is scaling: associated with it is the relation of *being greater than*; this relation is the main concern of this work. Another example would be the property of *being powerful*. It is possible that each of two entities should be powerful and yet one should be more powerful than the other. In other words, associated with the property of *being powerful* is the relation of *being more powerful than*.

Some properties are not scaling: *being a concrete object* is one. It is not possible that each of two distinct entities should be a concrete object and yet one should be more of a concrete object than the other. In other words, there is no (non-trivial) relation of *being more of a concrete object than* associated with the property of *being a concrete object*. Yet I think *being a concrete object* is still a great-making property, so every divine being is a concrete object.<sup>23</sup>

Some scaling properties may be possessed *maximally*. Where *F* is a scaling property, a being has *F* maximally if and only if it is not possible that there be

23 It might be objected that every property is trivially scaling in the sense that for each property it is logically possible that it be lacked (a degree of 0) and logically possible that it be possessed (a degree of 1). This would be a very uninteresting use of ‘scaling’, however. The relation associated with the property would also be uninteresting. Moreover, it would obscure an important distinction: the distinction between having a temporal duration of 0 seconds (the duration of an instant) and having no temporal duration at all (abstract objects have no temporal duration). This is similar to the distinction between a point’s having 0 cm of length and, say, a spirit’s having no length at all.

a being that has more  $F$ . Let us call a scaling property that a being may have maximally ‘a *maximality property*’, bearing in mind that it is the individual, not the property, that has the property of maximality. Formally, a scaling property,  $F$ , is a maximality property if and only if it is possible that there be a being,  $x$ , that has  $F$  to such a degree that there is no possible being that has more  $F$  than  $x$ .<sup>24</sup>

There are some scaling properties, such as size, in the set-theoretic sense of *cardinality* (which roughly equates with *number of members*), that cannot be possessed maximally. Let us call such a scaling property ‘a *non-maximality property*’. For example, for every possible set there is always a bigger possible set.<sup>25</sup>

There are also some scaling great-making properties that are such that a being may have them *optimally*. If  $F$  is a scaling great-making property a being,  $x$ , has  $F$  *optimally* if and only if nothing could be greater than  $x$  in virtue of having more or less  $F$ . Let us call a great-making property that a being can have optimally ‘a *optimality property*’. Formally, a scaling great-making property,  $F$ , is an optimality property if and only if there is some possible being,  $x$ , that has  $F$ , and it is not possible that there be a being,  $y$ , that is both exactly like  $x$  in all respects, save that  $x$  has more  $F$  than  $y$  or *vice versa*, and greater than  $x$ . For many optimality properties anything optimal will also be maximal, and conversely. More formally, there is a scaling great-making property,  $F$ , such that any object,  $x$ , is optimally  $F$  if and only if  $x$  is maximally  $F$ . Let us call such a scaling great-making property ‘a *maxi-optimality property*’.<sup>26</sup>

Some scaling great-making properties that are both maximality properties and optimality properties are not maxi-optimality properties, however. An example of this might well be lenience.<sup>27</sup> It is not obvious whether lenience is a maximality property (or even that it is a great-making property); I suggest tentatively, however, that it is possible to be infinitely lenient, and that anything infinitely lenient would be maximally lenient. Nevertheless, I contend that it is possible to be *too* lenient, i.e. that a maximally lenient being would not be optimally lenient. In other words, if there are three beings,  $a$ ,  $b$ , and  $c$ , each exactly like each of the others except that  $a$  is hardly lenient at all,  $b$  is very lenient but could be more so, and  $c$  is maximally lenient, then I think that in this case  $b$  would be greater than both  $a$  and  $c$ . I think this because it seems to me that an infinitely lenient being would be less great than some very lenient, but not infinitely lenient, being. It is great, I think, to be lenient, and a more lenient being is greater than a less lenient being – up to a point, the point of being optimally lenient. We do not need to establish now exactly where that point is, but it seems that too much lenience implies not enough justice, and that being optimally lenient is compatible with being maximally (or optimally) just. So, although lenience is a maximality property and an optimality property, it is not a maxi-optimality property. I shall call such a scaling great-making property,

24 Note that every non-scaling property could be thought of as a maximality property in a trivial way, since it is impossible that one thing have it more than another. To avoid this trivial consequence, I have stipulated that only a scaling property may be a maximality property.

25 This holds even if the set is infinite.

26 Trivially, greatness is itself a maxi-optimality property.

27 I am grateful to James Heather for this example.

## 12 Introduction

for the sake of a name, ‘a duality property’, from its dual nature, having a distinct optimal level and maximal level.

There are also some scaling properties that are neither optimality properties nor maximality properties, i.e. they are such that nothing has them maximally and nothing has them optimally either. Let us call such a scaling property (which does not have to be a great-making property) ‘an open property’, for the sake of a name. An example of an open property would again be size, in the set-theoretic sense, as given above. There is no optimal size *tout court*, though there may well be an optimal size with respect to a friendly seminar. If any open property is great-making we have a problem. It would seem, in that case, that there is, and could be, no divine being because for each possible object there would always be another possible object that is greater. Suppose size, in this set-theoretic sense, had been a great-making property (it isn’t), then there would have been no divine being because for every possible object there would have been always another possible object that was bigger, and thereby, greater. Hence there would have been no maximally great being and, therefore, no divine being.

So our strategy for delineating the concept of being divine is as follows:

- (i) determine what are the great-making properties;
- (ii) determine which great-making properties are scaling;
- (iii) determine which scaling great-making properties are optimality properties;
- (iv) determine which optimality properties are maxi-optimality properties and which duality properties.

How do we calculate the greatness of a being? The greatness of a being is given by a function from the number and sort and degree or level of its properties. It is necessary to consider the sort because it is not the case that all great-making properties are on a par: some confer more greatness than others. Rough guidelines for the comparison of two objects,  $x$  and  $y$ , with respect to the greatness relation, are as follows:

- If  $x$  possesses more great-making properties than  $y$  then  $x$  is, *ceteris paribus*, greater than  $y$ .
- If  $x$  possesses great-making properties that confer more greatness than  $y$  then  $x$  is, *ceteris paribus*, greater than  $y$ .
- If, for every scaling great-making property,  $F$ ,  $x$  possesses more of  $F$  than  $y$  then  $x$  is, *ceteris paribus*, greater than  $y$ .
- If, for every optimality property,  $F$ ,  $x$  is closer to having  $F$  optimally than  $y$  is, then  $x$  is, *ceteris paribus*, greater than  $y$ .

The reader may wonder why all this is necessary. It would be easy to say that a being,  $x$ , is maximally great if and only if:

- (i) If  $F$  is a great-making property then  $x$  has  $F$ .
- (ii) If  $F$  is an optimality property then  $x$  has  $F$  optimally.
- (iii) There is no open great-making property.

The problem with i–iii above is that it is the recipe for absolute perfection, which we rejected above, rather than for maximal greatness. It may be that there are

some great-making properties whose co-instantiation is impossible, or some great-making properties all of which it is not possible to possess maximally or optimally. If this is the case then no being will satisfy i–iii above, i.e. no being will be absolutely perfect, yet it is still possible, for all we know, that there be a maximally great being. Earlier we looked at the example of omnipotence and impeccability; I claimed that one might think that in order to be absolutely perfect a being would have to be both omnipotent (as traditionally defined) and impeccable (as traditionally defined); this, however, is impossible, and so absolute perfection, on this view, would be impossible. Another example might be: the virtues of teachableness and omniscience. An omniscient being cannot be taught anything and a teachable being is not omniscient.<sup>28</sup> Again, it may be that maximal prudence and maximal generosity, or maximal discretion and maximal valour, are incompatible. I aim in this work to show that problems of this type do not show that it is impossible that there be a maximally great being, even if they show that there could be no absolutely perfect one. My claim is that, if I have done this, I have shown that the concept of divinity is coherent, and that the divine nature is unified by the simple concept of maximal greatness.

### ***Which properties are great-making?***

How do we recognize which properties are great-making properties? As I mentioned above, I think that thought experiments are a useful way of proceeding here. Nelson Pike has some useful comments on the methodology of perfect-being theology:

If something is alive and conscious, that is a reason for preserving it. Consider the following exchange: A small boy drops a live frog in his mother's pulverizer. Father reprimands him: 'You ought not to have done that.' The boy calls for an explanation. Father replies: 'That was a living, conscious thing.' Father's reply may not be conclusive – there may be overriding reasons for destroying the frog. But father's reply is at least relevant as backing for his reprimand. That the frog was a living, conscious being is a good reason for not destroying it. Now consider the parallel exchange for the quality non-conscious. The boy drops his mother's watch in the pulverizer. Father reprimands him: 'You ought not to have done that.' The boy calls for an explanation. Father replies: 'That was a non-conscious thing.' This reply is absurd. That the watch was useful, beautiful, his mother's favourite, etc., would be relevant things to mention when grounding the reprimand, but the quality non-conscious is not a value-making feature of things. It is not a feature that makes a thing such that it ought to be preserved.

(Pike 1970: 136)

Pike admits that it is not always easy to tell what is greater than something else:

<sup>28</sup> I pass over here the problem that an omniscient being could be taught at each moment what time it is.

I think it must be admitted that the kind of value-judgement that we are here encountering is very difficult to understand. At a dog show, the judge rules that this beagle is a better beagle than that beagle. At the end of the show he is asked to make cross-type judgements, e.g., he is asked to decide whether this beagle is a better *dog* than that spaniel. But no one would ask the judge at a dog show to decide whether this beagle is a better *object* than, e.g., a kitchen dish. How could such a judgement be made? Yet, this sort of judgement is regularly made by us in everyday life. A dog-lover judges that his dog is a more valuable object than a kitchen dish – he spends his money on his dog and eats from a tin plate. If the house is burning down, he saves the dog and pays no attention to the dish. This is so even if the commercial value of the dog is considerably less than the commercial value of the dish. Consider the case where it is one's child in the burning house. One judges that the child is better (more valuable) than the dish. This is not to say that the child is a better *child* than the dish – the dish is not a contestant in that competition.

(Pike 1970: 141)

So we have intuitions about which properties are great-making properties, and we can excite those intuitions by thought experiments. As Tom Morris writes:

To begin to fill out this conception of the divine, to employ the full method of perfect being theology, we need to begin to consult our value intuitions. What properties can we intuitively recognize as great-making properties, and what clusters of properties can be seen likewise to correspond to a high value, or an exalted metaphysical stature? It is part of the method of perfect being theology to consult our intuitions on these matters. [. . .] Our construction of an Anselmian conception of God is fueled by our value intuitions and by our modal intuitions – our intuitions concerning what is possible and impossible. But because intuitions are correctable, and because our intuitions are typically not comprehensive, that is to say, because we do not typically have intuitions clearly leading us on every issue relevant to attaining a full conception of deity which might arise, the method of perfect being theology is not in principle cut off from creative interaction with other methods for conceiving of God.

(Morris 1991: 38–41)

So I shall now consider my intuitions about which properties are great-making properties. I shall start by taking the suggestion of Morris that:

In one representative example of an ascending order of discovery concerning the various aspects of his greatness in metaphysical stature, God can be conceived of in this way as:

- (i) conscious (a minded being capable of and engaged in states of thought and awareness);
- (ii) a conscious free agent (a being capable of free action);
- (iii) a thoroughly benevolent, conscious agent;
- (iv) a thoroughly benevolent, conscious agent with significant knowledge;



- (v) a thoroughly benevolent, conscious agent with significant knowledge and power;
- (vi) a thoroughly benevolent, conscious agent with unlimited knowledge and power, who is the creative source of all else;
- (vii) a thoroughly benevolent, conscious agent with unlimited knowledge and power, who is the necessarily existent, ontologically independent creative source of all else.

(Morris 1991: 39–40.)

Anselm himself offers a slightly briefer list:

For the supreme essence must not at all be said to be any of those things to which something that is not what they are is superior; and, as reason teaches, he absolutely must be said to be any of those things to which whatever is not what they are is inferior. He must therefore be living, wise, powerful and all-powerful, true, just, happy, eternal, and whatever similarly it is absolutely better to be than not to be.

(Anselm of Canterbury 1995: 29)

Morris justifies his list thus:

This representative list of seven stages of development in the elaboration of an Anselmian conception of God was constructed quite simply. First, it is agreed by many people that a being capable of conscious awareness is of greater intrinsic value or metaphysical stature than a thing with no such capacity, a rock for example. But then, it would be even greater not to be just a passive perceiver of things, or a conscious being confined to its own thoughts, but rather to be a conscious being capable of acting out its values and intentions into the world. And if to be an agent is good in itself, then to be an agent whose agency is thoroughly characterized by morally good or benevolent intentions is even better. Likewise, it is better for such an agent to have significant knowledge and power rather than to be extremely limited in these respects; and, finally, it would seem to be greater still to suffer no limits in these areas. Ultimately, a being unlimited in power and knowledge who was the source of all other beings would seem to be superior to one who, for all his excellence, was just one among other independent beings. And, at the limit of our conceptions, it would seem to be the greatest possible status to be such a being, exalted in all other respects, whose foothold in reality was so firm that it is impossible that the being not exist. Each level in our schematic ascent thus represents a development in our conception of greatness appropriate for the greatest possible being, which is God.

(Morris 1991: 40.)

These lists will provide us with a good starting-point for the exploration of the property of divinity.

First, I think that it is greater to be a concrete particular than an abstract object. Anselm would agree with this in that he claims that a concretely existing divine being is greater than one existing in the mind alone. One might think that the

superiority of *concreta* to *abstracta* is due to the fact that only the former are able to exert causal influence, and that it is greater to be able to exert causal influence than not to be able so to do. I think this is true, but perhaps not the whole truth; this raises the question of what the difference is between *abstracta* and *concreta*. Many think that the difference is just this: *concreta* are all and only those things such that it is metaphysically possible that they exert causal influence. *Abstracta* may then be defined as those existing things that are not *concreta*. If this view is right then clearly the statement above is the whole truth. I do not wish to pronounce on this matter, so I shall say merely that the superiority of *concreta* to *abstracta* is due *at least* to the fact that only the former are able to exert causal influence. On the other hand, some philosophers do not believe that abstract objects exist at all: for example, Richard Swinburne says that they are fictional entities (Swinburne 1994: 7). In this case there is no decision to be made: the theist must conceive of every divine being as a *concretum*, since everything that exists is a *concretum*. Somebody might claim that *abstracta* and *concreta* are incomparable. We might appease such a person by merely restricting our domain of quantification: by claiming that a divine being is the greatest possible *concretum*. (Conceivably, somebody might want also to claim that the idea of a divine being, whilst incomparable with a divine being itself, is the greatest possible *abstractum*.<sup>29</sup>)

We also want to say that every divine being is a particular as opposed to a universal. Again, philosophers differ over whether universals exist, what the difference is between universals and particulars, and how the distinction between these two relates to the distinction between *abstracta* and *concreta*. Some philosophers believe in tropes, regarding them as abstract particulars. On the other hand, perhaps particularly Platonistic philosophers think of properties, for instance, as concrete universals, with the property of goodness, say, exerting causal power over people.<sup>30</sup> Whatever the truth of the purely metaphysical debate, it seems that it is greater to be a particular than a universal. Again, it might be that someone would deny this and say that particulars and universals are incomparable as regards greatness. One could then respond, as before, by restricting the domain of quantification and saying that every divine being is a maximally great particular. (Conceivably, somebody might want also to claim that the property of divinity, while incomparable with a divine being itself, is a maximally great *universal*.)

Next, I wish to claim that every divine being is living and conscious. I think that Pike's thought experiment about the frog, the watch, and the pulverizer makes well the point that it is greater to be living and conscious than to be non-living or non-conscious. Furthermore, the fear that many people have of dying or losing consciousness is further evidence that people think that it is greater to be living and conscious than to be non-living or non-conscious. People fear these states

29 'On the contrary, it [the idea of God] is utterly clear and distinct, and contains in itself more objective reality than any other idea; hence there is no idea which is in itself truer or less liable to be suspected of falsehood. This idea of a supremely perfect and infinite being is, I say, true in the highest degree' (Descartes 1996: 31). Descartes would want, I think, to say that the idea of a divine being is the greatest possible idea; I do not think that he would want to say that it is incomparable with a divine being itself, since he also has a version of an ontological argument.

30 Perhaps Hugh Rice (2000) and John Leslie (1979) are such philosophers.

themselves, not just the pain of moving into these states; witness the fear of death of people even if they are assured that they will die painlessly. Similar considerations apply to agency and personhood. We can imagine that Pike's thought experiment would work equally well with the properties of being a person or being an agent. It is greater to be an agent (a being capable of action, to follow Morris's definition) than a being incapable of action. Likewise, it is greater to be a person than to be a non-person. It is much more difficult to define exactly what a person is, and it may be that the property of being a person supervenes on other great-making properties, but it seems clear that, whether superveniently or non-superveniently, it is greater to be a person than a non-person. Nor does it seem as if these properties pose any particular problems: most of those we intuitively think of as theists (some philosophers prejudge the issue by defining 'theism' as *belief in a personal, conscious, creator* – with certain qualities) would accept that every divine being is conscious, alive, a person and an agent, nor do there seem, thus far forth, to be any philosophical problems arising.

It should be noted, however, that some people think that there is more than one divine being. This is where I hope that concentrating on the property of divinity, strictly speaking, rather than on the object or objects that instantiate that property, may help. I think all should agree that the property of divinity is such that whatever instantiates it is a person. If this is too strong, we may modify it by introducing the notion of derivative personhood, and saying that something that is composed of persons may be loosely said to be personal in a derivative sense, perhaps analogously to the legal view that companies are persons. In this case, we may say that the property of divinity is such that whatever instantiates it is a person in a derivative or non-derivative way. I do not want to commit myself to this, but it should be noted that there may be resources available for those that wish to pursue this path. For ease of writing, I may occasionally write of God, when, strictly speaking, I should be writing of the property of divinity.

I also claim that every divine being has maximal epistemic greatness: no divine being is surpassable in knowledge (in content or in manner of knowing). I think power is also a great-making property, such that no divine being may be surpassed in power by any other possible being. I also want to claim that every divine being is perfectly morally good and maximally beautiful – that nothing can possibly exceed a divine being in moral or aesthetic value. I also wish to claim that every divine being is 'omnipresent' or not restricted as to where he may exercise his power or as to about where he is knowledgeable. Finally, I also wish to claim that possession of divinity implies metaphysically necessary existence and metaphysically essential possession of maximal greatness, and, hence, metaphysically essential possession of the great-making properties so far described. In other words, nothing that exists only by metaphysical contingency, or that has by metaphysical contingency one or more of the great-making properties so far described, is – or could be – divine. The intuition underlying this is that a being that exists of metaphysical necessity has a greater grip on reality than a being that exists of mere metaphysical contingency, and a being that possesses its properties of metaphysical necessity has a greater grip on them than a being that possesses them merely by metaphysical contingency.

It seems intuitively unsatisfactory to say that a divine being exists but might not have existed, or that a being is divine but might not have been. All these just-mentioned attributions are, however, the subject of great philosophical controversy. The burden of this book is to deal with that controversy in expounding these attributions and defending them against philosophical criticism. I shall leave most of the discussion for subsequent chapters, but for now I shall pause to explain what I mean by ‘metaphysical necessity’.

### ***Necessity and possibility***

The words ‘necessity’, ‘possibility’, ‘implication’, ‘entailment’ and their derivatives are used in various senses in philosophical discourse, and I believe that these different senses have led to some confusion.

I shall start with logic. It is easier to approach the issue here in terms of some artificial language containing variables, function symbols, predicate symbols, truth-functional connectives, and quantifiers. We can define on this language functions, called ‘valuations’, that map:

- (i) each of the variables to a member of some class, called ‘the domain of discourse’;<sup>31</sup>
- (ii) each function symbol to an appropriate operation on the domain of discourse;<sup>32</sup>
- (iii) each predicate symbol to an appropriate relation on the universe of discourse.

The only other restriction thus far is that every valuation must map the equality predicate symbol (if there is one) to the identity relation on the domain of discourse. So, for every atomic proposition, i.e. a predication of a property or relation of one or more individuals, there is a function that maps it to truth and a function that maps it to falsity, unless it is a predication of identity (an equation) of the form expressed by:

$$(1.4) \quad t = t$$

where ‘*t*’ is some term.<sup>33</sup>

It might be objected here that what I have described is the fact that there is no atomic *sentence*, other than an equation, such that it is mapped to one and the same proposition by every function that obeys the laws of logic. I reply that it should be borne in mind that my explanation was in terms of an artificial language principally for the sake of easy exposition. If we take a proposition predicating a property of an individual, logic does not tell us anything about the property, unless the property is that of identity. For instance, it is not a law of logic that *being greater than* is a transitive and asymmetric relation. Nor does logic tell us the extension of the

31 Usually it is insisted that the domain of discourse be a set, but this will not work for formal set theory, in which the domain of discourse is the proper class of all sets.

32 By ‘appropriate’ here and in iii I mean *of the same degree as*; in other words a binary predicate symbol must be mapped to a binary relation, a ternary function symbol to a ternary operation etc. That is to say, in general an *n*-ary function symbol must be mapped to an *n*-ary operation, and an *n*-ary predicate symbol must be mapped to an *n*-ary relation.

33 Please note that this assumes that there are no empty terms.

property. Similarly, logic does not tell one anything of the individuals referred to in the proposition, unless the individuals are referred to by the same designator, in which case logic tells one that they are identical, since it is a convention that a designator cannot change its reference. So for any particular case the laws of logic do not dictate that a predication of a property is true or that it is false, unless the property is the identity relation: in which case, a proposition expressed by a sentence of the form (1.4) is mapped to truth by every function. Compound propositions are defined in the usual way: a negation is mapped to truth if and only if the proposition it negates is mapped to falsehood, a conjunction is mapped to truth if and only if each conjunct is mapped to truth, a disjunction is mapped to truth if and only if at least one disjunct is mapped to truth, a conditional is mapped to truth if and only if either the antecedent is mapped to falsity or the consequent to truth, a biconditional is mapped to truth if and only if its left-hand side is mapped to the same truth-value as its right-hand side, a universal quantification is mapped to truth if and only if the quantified proposition is mapped to truth for every individual in the domain of discourse, an existential quantification is mapped to truth if and only if the quantified proposition is mapped to truth for some individual in the domain of discourse.

A proposition is said to be *necessarily true* if it is mapped to truth by every function. *Every* function? Here we find the different sorts of necessity. A proposition is said to be *logically necessary* or *logically true* if and only if it is mapped to truth by every function that obeys the laws of logic, i.e. the above stipulations.<sup>34</sup> A proposition is said to be *conceptually* necessary if and only if it is mapped to truth by every function that obeys the laws concerning concepts. What are these laws? They are what are discovered by philosophers engaged in conceptual analysis. For example, the sentence 'If one knows a proposition it is true' expresses a conceptually necessary truth, since the concept of knowledge includes that of truth. A proposition is said to be *metaphysically* necessary<sup>35</sup> if and only if it is mapped to truth by every function that obeys the above stipulations and that obeys the (other) laws of metaphysics (precisely what these are is a matter of debate among metaphysicians).<sup>36</sup> A proposition is said to be *nomologically* or *physically* necessary if and only if it is mapped to truth by every function that does not represent a contravention of the laws of nature. Finally, there is a trivial analogue: *material* necessity. A proposition is said to be *materially* necessary if and only if it is mapped to truth by every function that represents the world as it actually

34 The phrase 'the laws of logic' is sometimes used in other senses too, e.g. sometimes any theorem of the predicate calculus is called 'a law of logic', and sometimes only the laws of identity, non-contradiction, and excluded middle are called 'laws of logic'. Note that, on my definition, truths of mathematics, arithmetic or set theory are not logically necessary. C. I. Lewis at first used this sense of necessity (Lewis 1918). He later took necessity as a primitive notion (Lewis and Langford 1959). See the brief discussion in Kneale and Kneale (1962).

35 By 'metaphysically necessary' I mean what Plantinga calls 'necessary in the broadly logical sense' (1974: 2). Regrettably, most authors write just 'logically necessary' to mean what I mean by 'metaphysically necessary'. This has caused some confusion.

36 It is a separate debate as to which of these notions of necessity is the most fundamental. See, e.g., Swinburne (1994: 96–122).

is. In other words, material necessity is *truth*.<sup>37</sup> There are many other senses of necessity that can be defined, for instance *accidental necessity*. Precisely what this is will exercise us greatly below, but it may roughly be defined as follows: a proposition is *accidentally necessary* for a person if and only if it is mapped to truth by every function that obeys the stipulation of what is in that person's control (if a proposition is such that I cannot make it false then every function maps it to truth).

Many other notions are definable in terms of necessity. A proposition is said to be *necessarily false* or *impossible* if every function obeying certain stipulations maps it to falsity. For instance, a proposition is logically necessarily false if every function that obeys the laws of logic maps it to falsity. A proposition is *contingent* if it is neither necessarily true nor necessarily false.<sup>38</sup> For instance, a proposition is logically contingent if and only if some function that obeys the laws of logic maps it to truth and some function that obeys the laws of logic maps it to falsity. A proposition is *possibly true* or *possible* if it is necessarily true or contingent. For instance, a proposition is logically possible if and only if some function that obeys the laws of logic maps it to truth. A proposition is *possibly false* if it is necessarily false or contingent. For instance, a proposition is logically possibly false if and only if some function that obeys the laws of logic maps it to falsity.

Many relations between propositions are also definable in these terms. One proposition *implies* another if it is necessarily the case that if the first is true so is the second. For instance, one proposition logically implies another if and only if no function that obeys the laws of logic maps the first to truth and the second to falsity. Two propositions are *equivalent* if and only if each implies the other. For example, two propositions are logically equivalent if no function that obeys the laws of logic maps them to differing truth-values. A set of propositions is *satisfiable* if and only if it is possible that all of its members be true. For example, a set of propositions is logically satisfiable if and only if some function that obeys the laws of logic maps all of its members to truth. A set of propositions is *unsatisfiable* if it is not possible that all of its members be true. For instance, a set of propositions is logically unsatisfiable if and only if no function that obeys the laws of logic maps all the members of the set to truth.<sup>39</sup>

Finally, I distinguish, unlike most authors,<sup>40</sup> between implication and entailment. A set of propositions *entails* a proposition if it is not possible that each of the set be true and the entailed proposition false. It will be obvious that there is a close

37 It might seem as if this notion is too trivial to mention, but it is technically useful and certain other widely used concepts of materiality, e.g. material implication, are definable in terms of it.

38 Some authors say that a proposition is contingent if and only if it is true and not necessarily true.

39 I use 'satisfiable' and 'unsatisfiable' to denote properties of sets of propositions. I use 'compossible' and 'impossible' to denote relations between propositions. I therefore use sentences of the form '*p* and *q* are compossible' to mean that it is possible that both propositions are true. For example, *p* and *q* are logically compossible if and only if some function that obeys the laws of logic maps them both to truth. I use 'consistent', 'inconsistent' and 'contradictory' as syntactic terms. Hence they play no role here. Many authors do not follow this convention, but I take my lead from Machover (1996: Warning 7.8.2).

40 But like Flew (1979: 'implication').

relation between implication and entailment; a (finite) set of propositions entails a proposition if and only if the conjunction of the propositions in the set implies the entailed proposition. For example, a set of propositions logically entails a proposition if and only if there is no function that obeys the laws of logic that maps all of the propositions in the entailing set to truth and the entailed proposition to falsity. An argument is *valid* if and only if the set of the premisses of the argument entails the conclusion. For example, an argument is logically valid if and only if there is no function that obeys the laws of logic that maps all of the premisses to truth and the conclusion to falsity.<sup>41</sup>

What follows from all of this? It follows that no atomic proposition (i.e. bare predication of a property or a relation of one or more individuals) that is not an equation is logically necessarily true or necessarily false, i.e. every atomic proposition that is not an equation is logically contingent. It follows also that no two distinct atomic propositions that are not equations are logically equivalent, and no atomic proposition that is not an equation logically implies a distinct atomic proposition that is not an equation, i.e. all atomic propositions are logically compossible. No set of atomic propositions that are not equations logically entails an atomic proposition that is not an equation and is distinct from each of the propositions in the entailing set. Finally, then, no argument is logically valid if its premisses are atomic propositions that are not equations and its conclusion is an atomic proposition that is not an equation and is distinct from each of the premisses.

In particular, we must note that the proposition expressed by the following sentence is logically contingent (like all statements asserting the existence of a particular individual):

(1.5) A divine being exists.<sup>42</sup>

Finally before moving on, we should note that although the derivative concepts are usually couched only in logical terms, they may be couched in any of the other terms that we came across in our discussion of necessity. For instance, *p* accidentally implies *q* if and only if it is accidentally necessary that if *p* obtains then *q* obtains.

To say that necessary existence is a great-making property does not, however, imply that existence itself is a great-making property. It is true that if something exists necessarily it exists in the actual world, but it is not the case that everything whose possession is implied by possession of a great-making property is itself a great-making property. Further, endorsement of the view that necessary existence is a great-making property does not imply endorsement of the ontological argument for the existence of a divine being or the ontological argument for the necessary existence of a divine being. Nor does it imply that existence is a property rather than a predicate – merely that necessary existence is a property.

41 Most philosophers work with only one sense of ‘valid’, usually corresponding to metaphysically valid. I think it important to specify the difference senses of ‘valid’. Confusion has been caused by some people’s taking a given argument to be (logically) invalid and others taking it to be (metaphysically) valid without specifying the senses of ‘valid’ at issue. Again, some use ‘valid’ as a syntactic term. I am here using it as a semantic term.

42 I do believe that the proposition expressed by (1.5) is *metaphysically* necessary, but even the ontological argument cannot establish the existence of God by pure *logic*, so it is logically contingent.

***Simplicity***

The reader may be wondering why I have not yet treated the doctrine of divine simplicity. I have left it till last because I do not agree with it, and wanted to expound first the doctrines that I affirm before moving on to those that I deny.

The doctrine of divine simplicity comes in various degrees of strength. The strongest version holds that there is no composition at all in any divine being, so not only are there no spatial or temporal parts to a divine being, but the substance–attribute distinction does not hold either. So there is no distinction between a divine being and any property that he might possess, or between him and existence. Aquinas, like most mediaevals, held this strong version of the doctrine:

For God, we said, is not composed of extended parts, since he is not a body; nor of form and matter; nor does he differ from his own nature; nor his nature from his existence; nor can one distinguish in him genus and difference; nor substance and accidents. It is clear then that there is no way in which God is composite, and he must be altogether simple. [...] Now God is form itself, indeed existence itself; so he can in no way be composite.

(Aquinas 1963: Ia.3.7)

This doctrine is extremely counter-intuitive, for it has the consequence that every divine being is a property. We saw above, however, that it is better to hold that every divine being is a substance rather than an attribute, since if  $x$  is a substance and  $y$  is a property then  $x$  is greater than  $y$ , *ceteris paribus*. (Even if the simplicity theorist holds that every divine being is a substance as well, there is still the problem that every divine being is a property too – is it possible to be both a substance and a property?)

Slightly less counter-intuitive is the modified doctrine that preserves the distinction between existence and essence, such that every divine being is distinct from his existence, but identical with his essence, which is a single property, since every property he possesses (and is identical with) is identical with every property he possesses (and is identical with). This is still too much to swallow, however, since it still insists, counter-intuitively, that every divine being is a property. A more moderate form of divine simplicity is that, while every divine being is indeed distinct from his essence, and distinct from every property he possesses, every property he possesses is identical with every property he possesses. This is still counter-intuitive, however: it has the consequence that omnipotence is the same property as omniscience, for example. It seems quite easy for us to imagine a being that is omniscient and yet not omnipotent, however. Our imaginations may, of course, be faulty in this regard, but we are owed an argument by the simplicity theorist as to why it is not possible that an omniscient being be limited in power. The simplicity theorist may reply by moving to a still more moderate version of the doctrine: the view that the properties that every divine being possesses are distinct one from another, but the divine being's possession of each property that he possesses does not vary from property to property. A slight variation on this is to hold that the instantiation of one property in a divine being is the same as the instantiation of another property in him. The doctrine that every divine being is outside time (see



discussion in Chapter 7) is also a version of divine simplicity, since it is often motivated by a denial of any temporal parts in a divine being.

Katherin Rogers claims that the problems with the doctrine of divine simplicity are mitigated if one thinks of every divine being as pure act rather than as a property (Rogers 2000: 27). But surely the correct conclusion for the defender of divine simplicity to draw is that every divine being is both act and property, which conclusion merely compounds the problems. In any case, it is not clear that regarding every divine being as pure act is much more plausible. It is hard to see that pure act could also be a person and a loving creator. The notion of free creatorship is even more difficult to reconcile with this idea of simplicity: one intuitively thinks that every divine being is perfectly free, and so is free to create and free to refrain from creating. But if a divine being has the property of creating then it seems as if he must create, since he will, in that case, according to the doctrine of divine simplicity, be identical with this property, and, thus, be necessarily identical with it. (I here appeal to the principle that all identities are (metaphysically) necessary.) It is hard to see that claiming that every divine being is an act rather than a property will help matters here: if every divine being is identical with his act of creation, it still seems as if every divine being must create. It seems to me preferable to believe in the contingency of creation rather than the absolute simplicity of a divine being if, as I have argued, one must choose.

### *Miller's criticism*

The Anselmian line of argument mentioned above is not free from criticism. Some philosophers claim that they cannot make sense of the idea of greatness *simpliciter*. This claim seems to me, however, to be undercut by the fact that almost everybody would save a human rather than an inanimate object from a burning house. This fact seems to me to reflect the value that we, perhaps unconsciously, place on human life.

The Anselmian line has, however, been criticized from another angle. Barry Miller has attacked the claim of the perfect-being theologian that a divine being is on the same scale as every non-divine being. He suggests an alternative conception of divinity:

[T]he alternative was to consider the possibility of the greatest being as not restricted to lying *on* any scale whatever – not even at the summit – but as that to which the items on the scale merely *point* or that towards which they merely tend to converge without ever actually doing so. In other words, what should at least have been considered was the possibility of the greatest *F* not being the final member in a series of members that were *F* to an increasing degree, not belonging to the series at all, but lying completely *outside* it. In that case, the greatest *F* would not be a maximum or limit *simpliciter* in an ordered series of *F*s, as Anselmians understand it to be. Rather, it would be the limit *case* of such a series.

(Miller 1996: 4)

This passage is most confusing: if something,  $x$ , does not belong to the series of things that have  $F$  then  $x$  itself does not have  $F$ ; in what respect, then, is it being compared with those things that do have  $F$ ? In addition, if  $F$  is a degreed property and  $x$  has  $F$  then it follows that there is some degree to which  $x$  has  $F$ . Finally, Miller misunderstands the notion of a limit case:

A basic difference between a limit simpliciter and a limit case is that the former differs merely in degree from that of which it is a limit simpliciter, whereas the latter differs absolutely from that of which it is a limit case: the limit *simpliciter* of an  $F$  is an  $F$ , whereas the limit *case* of an  $F$  is decidedly not an  $F$ .

(Miller 1996: 7)

Each of the examples that Miller adduces to substantiate his definition is faulty. His first example is that 0 km/s is a lower limit case for speed whereas there is no lower limit *simpliciter*, since 0 km/s ‘is not a speed at all’. This is wrong in every respect. First, 0 km/s is a speed: there is an important difference between something that has a speed of 0 km/s and something that has no speed. Non-physical things, such as divine beings and abstract objects, have no speed, whereas a physical thing perfectly at rest would have a speed of 0 km/s. It follows that 0 km/s is a lower limit *simpliciter* for speed, since it is impossible to travel more slowly than 0 km/s.<sup>43</sup> Miller’s second example is that of a ‘zero-place predicable’. Miller claims that these are lower limit cases and not lower limits *simpliciter* for the series ⟨... , 4-place predicable, 3-place predicable, 2-place predicable, 1-place predicable⟩. Here Miller asserts that the 1-place predicable is the limit *simpliciter* of the series, but that the 0-place predicable is the limit *case* of the series, of which he says ‘although different in kind from the series’ members, it is that towards which those members do point’ (Miller 1996: 8). Miller does not explain in what sense the members of the series point to it, nor how they point to something that is not a member of the same series. What gives Miller’s point its initial plausibility is that 0 is the limit *simpliciter* of the sequence ⟨... , 4, 3, 2, 1, 0⟩. A predicable or predicate is, in fact, an entity that contains 0 or more gaps such that if names or other referring expressions are placed in all the gaps the result is a declarative sentence. It follows that a declarative sentence is itself a 0-place predicate, since it contains 0 gaps and if these gaps are filled with names or other referring expressions (if nothing is done, in other words) we have a declarative sentence (i.e. nothing happens). Hence the 0-place predicate or predicable *is*, contrary to Miller’s assertion, a limit *simpliciter* for the sequence ⟨... , 4-place predicable, 3-place predicable, 2-place predicable, ...⟩.

Miller then gives the examples of the point, which he says is the limit case of the line, and the line, which he says is the limit case of the surface. Again, each of these is defective. A point is a line of length 0 units, and a line is a surface of 0 units breadth. Hence these are actually limits *simpliciter*, rather than limit cases.

<sup>43</sup> It might be claimed that someone travelling backwards would be travelling less than 0 km/s in a particular direction, but we are here discussing speed in general, not speed in any particular direction.

Miller's final example is his only one that is mathematically correct. This example is that the circle is the limit case of the polygon. Miller is correct that the circle is not a polygon, though sometimes people wrongly claim that a circle is a polygon with infinitely many sides (a circle actually has no sides). What does it mean, then, to say that the circle is the limit case of the polygon? Several equivalent definitions can be given, but the easiest is as follows:

(D1.1) The circle is the limiting case of the regular polygon in that as the number of sides of the polygon tends to infinity so the ratio of the length of the perimeter of the polygon to the length of the diameter tends to what it is in a circle –  $\pi$ .

To be more exact:

(D1.2) The circle is the limiting case of the regular polygon in that, for every real number,  $\epsilon > 0$ , there is a natural number,  $N$ , such that for any  $n$ -sided regular polygon,  $P$ , with  $n > N$ , it is the case that  $|\pi - (p(P)/d(P))| < \epsilon$ , where  $p(P)$  is the length of the perimeter of  $P$  and  $d(P)$  is the length of the diameter (i.e. twice the length of the radius) of  $P$ .

The problem here is that this, the correct mathematical concept of a limiting case, will not support Miller's point. First, note that we need to be able to compare the circle and the polygons in some respect. This we do by comparing the length of the perimeter in each case with the length of the diameter in that case. This ratio is a real number. The set of real numbers is totally ordered by the familiar relation of greater than or equal to, and we can say that for every polygon this ratio is less than  $\pi$ , whereas for every circle it is equal to  $\pi$ . In order for this to apply to the case of a divine being, we must say that he may be compared with other beings, and this must be (in the context) with respect to greatness. This comparison undermines Miller's whole aim: to show that no divine being is comparable with any non-divine being. Secondly, what Miller's point amounts to with respect to divinity is the claim that one may get as close as one likes to divinity with respect to greatness, but it is never possible for one quite to get there. More formally, his claim amounts to the view that for any positive difference of greatness you please there is a non-divine being whose greatness differs by less than that degree from the greatness of a divine being. It is this, and not perfect-being theology, that belittles the divine. Indeed, I think that there is an infinite gap in greatness between a divine being and any actual non-divine being. I must admit, however, that it is not clear that there is such a gap between a divine being and any possible non-divine being. Consider, for example, the possible being that is maximally powerful, perfectly good, omnipresent, and so on, but fails to be omniscient, and so fails to be divine, in that he has forgotten how many hairs are on my head, although he knows everything else (apart from propositions knowledge of which would imply knowledge of how many hairs are on my head). Is this being infinitely less great than a divine being? It seems not. At this point, the reader may protest that if one takes the greatness of a divine being, which is infinite, and subtracts the tiny degree of greatness afforded by knowing how many hairs are on my head, one is left with the same infinite degree of greatness as one started with. The problem with this argument is that it

assumes that greatness follows cardinal ordering when it comes to infinite degrees of greatness. This is not so, however. Indeed, a better mathematical model would be ordinal ordering. In other words, if, for example, each of two beings, *a* and *b*, knows infinitely many propositions, but *a* knows everything that *b* knows and one extra proposition, then *a* is, *ceteris paribus*, greater than *b*, even though each of them is, *ceteris paribus*, infinitely great. The relation of *being greater than* is sensitive to differences even among infinite degrees.

Not only do all of Miller's examples fail to support his point, but the point itself is fundamentally flawed. It is true that there is a distinction, when we have a degreed property, *F*, and a class, *S*, of beings possessing the property, between something that possesses *F* more than anything in *S* – an upper bound for *S* – and a member of *S* such that nothing in *S* possesses *F* more than it – a maximal member of *S*. Miller's point amounts to the suggestion that we should think of every divine being as an upper bound for the class of beings with great-making properties, rather than as a maximal member of this class. This suggestion is, however, doubly problematic: Miller is committed to denying that any divine being is a member of the class of beings with great-making properties, and, therefore, he is committed to denying that any divine being is great. This point seems to me unacceptable; Miller is able to support it only by reference to his idea that when a divine being is said to be 'great' he is so said only analogically, and so cannot be included in the class of beings with great-making properties. A detailed consideration of the merits of an analogical, as opposed to univocal, approach to religious language is beyond the scope of this book; for now, I must content myself with merely remarking that Miller's point amounts to the implausible suggestion that no divine being is great, where 'great' means what it means when we use it of others. The second problem with Miller's point is that he needs to claim that every divine being is comparable with other beings in order that he might be a limit case of the sequence of great beings. But in what respect might a divine being be comparable with them apart from greatness? Miller must surely say that every divine being is a limit case with respect to greatness; this implies that every divine being is greater than every other possible being. Miller may deny that any divine being is in the class of beings with great-making properties by denying that any divine being is a 'being' in the same way as a non-divine being, but he cannot claim that no divine being is great without foregoing the very method of comparison on which his 'limit-case' claim rests.

Even if this successfully deals with these just-mentioned philosophical problems, however, I cannot avoid those that begin to arise when we consider omniscience, or maximal knowledge – problems both of the internal consistency of this attribute and of its consistency with perfect freedom. I shall now turn to consider omniscience in the next chapter.