

Thomas vs. Thomas: A New Approach to Nagel's Bat Argument

Yujin Nagasawa

Australian National University

In this paper I examine Thomas Nagel's familiar challenge to physicalism. Nagel illustrates the difficulty of providing a purely physical characterisation of phenomenal experience with a vivid example about a bat's sensory apparatus. While a number of objections have already been made to Nagel's argument, I propose a novel way of undermining it. Adapting Thomas Aquinas's principle regarding the nature of divine omnipotence, I argue that the fact that we cannot know what it is like to be a bat does not threaten physicalism.

In his famous paper, 'What Is It Like To Be a Bat?' (1974) Thomas Nagel illustrates the difficulty of characterising phenomenal consciousness in general. Nagel argues that in order for us to know the subjective nature of a bat's phenomenal experience we need to share a bat's 'point of view'. However, he contends, a bat's sensory apparatus is so fundamentally different from ours that it appears impossible for us to have that point of view. Therefore, he concludes, we seem unable to know 'what it is like to be a bat'.

While Nagel is not himself explicit about the implication of this line of reasoning in his 1974 paper, his argument has been taken as a powerful criticism of physicalism. In fact, many philosophers claim that Nagel's argument is, at its root, identical to Frank

Jackson's Knowledge Argument (1982, 1986), which is specifically designed to defeat physicalism.¹ Some even call this style of anti-physicalist argument the 'Nagel-Jackson Knowledge Argument'.² Moreover, Nagel himself rejects physicalism in his later book (1986). In this paper I hope to show that, whatever may be the verdict on Jackson's Knowledge Argument, Nagel's argument does not undermine physicalism.

As Daniel Dennett (1991) writes, the argument is regarded as '[t]he most widely cited and influential thought experiment about consciousness' (p. 441) and accordingly a number of objections have already been made to it.³ However, I propose to undermine Nagel's argument in a novel way, which appeals to Thomas Aquinas' principle regarding the nature of divine omnipotence, an issue in the philosophy of religion that, at first sight, has no connection with the argument.

I. The Bat Argument

Nagel's bat argument is based on a prevalent worry among contemporary physicalists that the phenomenal aspect of the world might necessarily remain physically or objectively uncharacterised. Nagel claims, 'If physicalism is to be defended, the phenomenological features must themselves be given a physical account. But when we examine their subjective character it seems that such a result is impossible.' (1974, p. 437).

In order to illustrate his claim Nagel introduces the famous example of a bat. A bat presents a range of activities and a sensory apparatus that are radically different from ours. In particular, it has a unique perceptual system: sonar. While bat sonar is 'clearly a

form of perception', Nagel says, 'it is not similar in its operation to any sense that we possess' (p. 438). Nagel considers a bat, rather than a bird or a fish, as he explains it, for the following two reasons. First, since a bat is a mammal there is no doubt that it has consciousness, just as much as a dog or a chimpanzee. Second, a bat's extremely unusual sensory apparatus enables it to have its own, very special, point of view. Since 'every subjective phenomenon is essentially connected with a single point of view' (p. 437), Nagel argues, a human being like him, who cannot have a bat's point of view, is precluded from knowing what it is like to be a bat.

Nagel's bat argument may be schematised as follows:

The Bat Argument

- (1) If x is not a bat-type creature, then x does not have a bat's point of view.
- (2) If x does not have a bat's point of view, then x cannot know what it is like to be a bat.

Therefore,

- (3) If x is not a bat-type creature, then x cannot know what it is like to be a bat.
- (4) Nagel (a human being) is not a bat-type creature.

Therefore,

- (5) Nagel (a human being) cannot know what it is like to be a bat.⁴

By a bat-type creature, I mean a creature that is reasonably similar to a bat with respect to its perceptual apparatus. Roughly speaking, if a creature is bat-type, it can have a bat's point of view and hence it is in a position to know what it is like to be a bat.⁵

However, since Nagel is not a bat-type creature he cannot have a bat's point of view and accordingly he is not in a position to know what it is like to be a bat.

II. Objections to the Bat Argument

Notice that so far, the bat argument does not say anything about the status of physicalism. It says only that Nagel (a human being) cannot know what it is like to be a bat. Hence, in order to derive the falsity of physicalism from the bat argument, more premises are needed, as I explain in detail in the next section. For the present, I wish to consider two typical objections to the bat argument itself, both of which say that there is something wrong with it because we *can* know what it is like to be a bat. Nagel's replies to those objections clarify what exactly he means by the phrase 'what it is like to be a bat'. We then see that knowing what it is like to be a bat is much harder than people tend to think.

Objection 1: Imagination / Simulation

One might object to Nagel's argument by stating that if we have great powers of imagination, or a sophisticated simulation system, it is perfectly possible for us to know what it is like to be a bat without being a bat-type creature. That is, according to this objection, (3) is false. Surely, we cannot know what it is like to be a bat just by reading textbooks on physics or biology. However, the objection says, we *can* know it by carefully imagining or simulating how a bat, for example, flies and detects the location of its target; just as one, who has never controlled an airplane, can know what it is like to

be a pilot by using a well-designed flight simulator. However, this objection is not to the point, for imagination or simulation plays no part in what Nagel means by what it is like to be a bat:

In so far as I can imagine this (which is not very far), it tells me only what it would be like for *me* to behave as a bat behaves. But that is not the question. I want to know what it is like for a *bat* to be a bat. Yet if I try to imagine this, I am restricted to the resource of my own mind, and those resources are inadequate to the task. I cannot perform it either by imagining additions to my present experience, or by imagining some combination of additions, subtractions, and modifications.

To the extent that I could look and behave like a wasp or a bat without changing my fundamental structure, my experiences would not be anything like the experiences of those animals. (1974, p. 439)

The above passage suggests that what Nagel intends is the following:

(6) Nagel (a human being) knows what it is like for a bat to be a bat.⁶

However, if Nagel imagines or simulates being a bat he can bring about only the following:

(7) Nagel (a human being) knows what it is like for a human being to behave as a bat behaves.

(7) is clearly different from (6). And the bat argument says that (6) is impossible to bring about.

Objection 2: Transformation / Transplant

One might also object to Nagel's argument by claiming that it is possible for Nagel to know what it is like to be a bat by transforming himself into a bat or transplanting a bat's neurophysiological system into his body. That is, according to this objection, again, (3) is false. What this objection suggests might sound unrealistic, but we may at least imagine it as a possibility. However, Nagel says, this is not what he intends either:

[I]t is doubtful that any meaning can be attached to the supposition that I should possess the internal neurophysiological constitution of a bat. Even if I could by gradual degrees be transformed into a bat, nothing in my present constitution enables me to imagine what the experience of such a future stage of myself thus metamorphosed would be like. The best evidence would come from the experience of bats, if we only knew what they were like. (1974, p. 439)

If Nagel transforms himself into a bat then he may bring about at most the following:

(8) Nagel (a bat) knows what it is like for a bat to be a bat.

Again, this is different from what he intends:

(6) Nagel (a human being) knows what it is like for a bat to be a bat.⁷

Colin McGinn (1999) suggests that in order to bring about what Nagel wants '[w]e would have to become half bat—bat men, literally' (p. 54). However, even if we grant that Nagel can really become a batman and that a batman is reasonably similar to a bat it would still not suffice. For by being a batman Nagel can bring about only the following:

(9) Nagel (a batman) knows what it is like for a bat to be a bat.

Although (9) might be slightly closer to what Nagel intends it is still far from

satisfactory. For what he intends is not that a half-bat, half-human monster knows what it is like for a bat to be a bat. What he really wants is that he, as a normal human being, knows what it is like for a bat to be a bat.

A batman is like a bat that is as intelligent as a human being. If there were such a being then perhaps it could talk about what it is like to be a bat in a human language. However, Nagel's complaint is not that there is not such a creature. It is rather that we are not equipped with a bat's sensory system and that this fact precludes us, *as regular human beings*, from knowing the subjective nature of a bat's phenomenal experience.

III. The Antiphysicalist Argument

We have seen that Nagel shows vividly what a 'fundamentally *alien* form of life' (p. 438) a bat is and how hard it is for us to have a bat's point of view. Thus, we may say that Nagel's bat argument is successful in showing the difficulty for a human being, of knowing what it is like to be a bat. However, it is not at all clear how this difficulty could threaten physicalism.

Nagel's ultimate goal is to undermine physicalism by showing the difficulty of giving a purely physical characterisation of what it is like to be a bat. However, the bat argument shows only that it is hard to know what it is like to be a bat *in general*. Knowing what it is like to be a bat in general is not the same as knowing a physical characterisation of what it is like to be a bat. For it might be possible that we manage to know what it is like to be a bat in general *without* being able to characterise it in physical terms. I claim that this might be possible because *we do know what it is like to be a human*

being without being able to characterise it in physical terms. Thus, there is a gap between the difficulty of knowing what it is like to be a bat in general, which the bat argument elaborately shows, and the difficulty of knowing a purely physical characterisation of what it is like to be a bat, which Nagel really needs to show. In order to fill this gap, Nagel needs to add more premises to the bat argument.

Regarding what physicalism needs to accomplish, Nagel states as follows:

While an account of the physical basis of mind must explain many things, this appears to be the most difficult. It is impossible to exclude the phenomenological features of experience from a reduction in the same way that one excludes the phenomenal features of an ordinary substance from a physical or chemical reduction of it—namely, by explaining them as effects on the minds of human observers. If physicalism is to be defended, the phenomenological features must themselves be given a physical account. (1974, p. 437)

Nagel claims that physicalism has to, if it is true at all, provide complete explanation of not only physical, chemical and biological but also phenomenal features of the world. It follows that if physicalism is true then one who knows everything physical knows everything simpliciter. Applying this claim to the bat case we get the following:

(10) If physicalism is true then x , who knows everything physical about bats, knows everything about bats.

An addition of the following innocuous statement enables Nagel to derive the falsity of physicalism:

(11) If x knows everything about bats then x knows what it is like to be a bat.

Now consider a particular example. Suppose that Nagel knows everything physical about bats. If physicalism is true, then, according to (10), he knows everything about bats. And if he knows everything about bats, according to (11), then he knows what it is like to be a bat. However, as the bat argument shows, he cannot know what it is like to be a bat, simply because he is not a bat-type creature. It follows that Nagel, who is physically omniscient, does not know everything about bats and accordingly that physicalism is false.⁸ This line of reasoning can be schematised as follows:

The Antiphysicalist Argument

(12) If physicalism is true then Nagel, who knows everything physical about bats, knows everything about bats.

(13) If Nagel knows everything about bats then he knows what it is like to be a bat.

(14) Nagel cannot know what it is like to be a bat. (Conclusion of the bat argument)

Therefore,

(15) Nagel cannot know everything about bats.

Therefore,

(16) Physicalism is false.⁹

The most popular response to the antiphysicalist argument is to reject (12) by appealing to so-called *a posteriori* physicalism. According to this response, even if physicalism is true it is perfectly possible that Nagel, who knows everything physical about bats, does not know everything phenomenal about bats. For, there is no *a priori* derivation from

physical facts (about bats) to phenomenal facts (about bats). I do not examine this response here¹⁰ because what I show in the following entails that even if *a posteriori* physicalism is false, Nagel's argument does not undermine physicalism.

In order to accomplish my aim I introduce an important principle in the philosophy of religion, a principle that, on the face of it, has nothing to do with Nagel's argument. As we see below, this principle can be used to block his antiphysicalist argument.

IV. The Thomistic Principle

According to Judaeo-Christian theism, God is necessarily omnipotent. Thus, roughly speaking, He is able to do anything.¹¹ However, Aquinas argues that 'anything that implies a contradiction does not fall under God's omnipotence' (1266-1273, p. 167). He writes:

[God] cannot make one and the same thing to be and not to be; He cannot make contradictories to exist simultaneously. Contradiction, moreover, is implied in contraries and privative opposites: to be white and black is to be white and not white; to be seeing and blind is to be seeing and not seeing. For the same reason, God is unable to make opposites exist in the same subject at the same time and in the same respect. (1259-1264, p. 8)

So, for example, according to Aquinas, the fact that God cannot draw a square circle or make a married bachelor does not entail that God is not omnipotent. Using somewhat contemporary terminology, Aquinas's principle may be stated as follows:

Thomistic Principle (TP): The fact that God does not have a power to do what it

is necessarily impossible to do does not undermine His omnipotence.¹²

Ever since Aquinas, (TP) has been used only to defend the omnipotence of God. However, I believe, the idea behind (TP) is more general and the principle may be modified so as to be applicable to other sorts of argument as well. I demonstrate this in the next section.

V. The Revised Thomistic Principle

The applicability of (TP) may be widened significantly if we reformulate it according to the following three points.

First, when Aquinas formulated (TP) he was, of course, not aware of Kripke's distinction between the necessary *a priori* and the necessary *a posteriori* (Kripke, 1972). Thus Aquinas had only necessary *a priori* impossibilities in mind, impossibilities such as drawing a square circle or creating a married bachelor. However, (TP) must be applied to *all* necessary impossibilities, both *a priori* and *a posteriori*. Hence, the omnipotence of God is not undermined even though he cannot perform such necessary *a posteriori* impossibilities as separating water from H₂O or Hesperus from Phosphorus.

Second, (TP) may be more clearly formulated by introducing the notions of 'pseudo tasks' and 'real tasks'. It is necessarily impossible to perform pseudo tasks, while it is possible to perform real tasks. Drawing upon the distinction appealed to above, concerning *a priori* and *a posteriori* impossibilities, it may be either *a priori*, or *a posteriori*, impossible to perform any given pseudo task. While arguably an omnipotent God is able to perform all real tasks, such as drawing a circle or baking a chocolate cake, He does not

have to be able to perform, according to (TP), any kind of pseudo task, such as drawing a square circle or creating a chocolate cake that is Socrates at the same time, for they are not, in fact, tasks at all!¹³

Third, the basic idea in Aquinas's principle is relevant not only to God but also to anyone. For, if an omnipotent God does not have to be able to perform a pseudo task, then surely no one has to be able to perform a pseudo task. Hence, for example, my failure to draw a circle in a geometry examination indicates my lack of geometrical skill, but my—or anyone's—failure to draw a square circle does not indicate any such lack (Mavrodes 1963, p. 221); for, again, it is not merely contingently, but necessarily impossible to do.

Taking the above three points into consideration, (TP) can be revised as follows:

Revised Thomistic Principle (RTP): For any agent x , the fact that x does not have a power to perform a pseudo task does not entail x 's lack of power.

I now apply (RTP) to Nagel's argument.

VI. Applying the Revised Thomistic Principle

With (RTP) in mind, consider the bat argument again.

- (1) If x is not a bat-type creature, then x does not have a bat's point of view.
- (2) If x does not have a bat's point of view, then x cannot know what it is like to be a bat.

Therefore,

- (3) If x is not a bat-type creature, then x cannot know what it is like to be a bat.

(4) Nagel (a human being) is not a bat-type creature.

Therefore,

(5) Nagel (a human being) cannot know what it is like to be a bat.

According to this argument, Nagel (a human being) cannot know what it is like to be a bat simply because he is not a bat-type creature. However, suppose, for the sake of argument, that Nagel (a human being) does have a miraculous power to know what it is like to be a bat. Then the following is true:

(17) Nagel (a human being) can know what it is like to be a bat.

(3) is logically equivalent to the following:

(18) If x can know what it is like to be a bat, then x is a bat-type creature.

Applying (18) to (17) we can derive:

(19) Nagel (a human being) is a bat-type creature.

However, (19) is false because, as Nagel emphasises, a human being is fundamentally different from a bat-type creature. Furthermore, (19) is not merely contingently, but *necessarily* false.¹⁴ Thus, by proposing his argument Nagel requires physicalism to place him in a position to perform a pseudo task, namely, being a bat-type creature while being a non-bat-type creature.

Now it is clear that Nagel's antiphysicalist argument is parallel to a typical, unsuccessful argument against Judaeo-Christian theism:

The Antitheist Argument

(20) If Judaeo-Christian theism is true then God can do everything.

(21) If God can do everything then God can draw a square circle.

(22) God cannot draw a square circle.

Therefore,

(23) God cannot do everything.

Therefore,

(24) Judaeo-Christian theism is false.

The contraposition of (21) says that if God cannot draw a square circle then God cannot do everything. However, (RTP) says that even if God cannot perform a pseudo task like drawing a square circle that does not entail His lack of power. Therefore, given (RTP), the antitheist argument is unsuccessful. Judaeo-Christian theism is not undermined just by the fact that God cannot perform a pseudo task.¹⁵

The following is Nagel's antiphysicalist argument that we have discussed:

(12) If physicalism is true then Nagel, who knows everything physical about bats, knows everything about bats.

(13) If Nagel knows everything about bats then he knows what it is like to be a bat.

(14) Nagel cannot know what it is like to be a bat.

Therefore,

(15) Nagel cannot know everything about bats.

Therefore,

(16) Physicalism is false.

Just as the argument against Judaeo-Christian theism is unsuccessful, the above argument against physicalism is unsuccessful. Given that an acquisition of knowledge

requires one to have a particular power—an epistemic power, if you like—Nagel, who knows everything about bats, is regarded as omnipotent with respect to knowing about bats. The contraposition of (13) says that if Nagel does not know what it is like to be a bat then he does not know everything about bats. However, (RTP) says that even if Nagel cannot perform a pseudo task that does not entail his lack of power. Hence, the fact that Nagel cannot perform such a pseudo task as knowing what it is like to be a bat does not undermine Nagel's omnipotence with respect to knowing about bats. Therefore, given (RTP), the argument is unsuccessful. Physicalism is not undermined just by the fact that Nagel cannot perform a pseudo task.

Notice that if Nagel's bat argument is cogent then God, who is not a bat-type creature, cannot know what it is like to be a bat either.¹⁶ And, according to (TP), God does not have to be able to do it in order to be omnipotent. Why, then, do human beings have to be able to do what even God does not have to be able to do in order only to defend physicalism?

VII. Possible Objections

I now examine three possible objections to my argument.

Objection A: The McEar Problem

One might try to undermine my argument by rejecting (TP), on which (RTP) is based, on the grounds that it is unacceptable because it entails that a being that is obviously not omnipotent *is* omnipotent. This is the infamous 'McEar problem'. Borrowing Bruce

Reichenbach's refinement (1980) of Alvin Plantinga's example (1967), imagine an extraordinary creature called Mr. McEar. Mr. McEar is a being such that *necessarily* he is only capable of scratching his left ear. If (TP) is correct then, according to this objection, one cannot undermine the omnipotence of Mr. McEar because he can do *everything* except what it is necessarily impossible for him to do. 'Everything' is, of course, to scratch his left ear.

However, as many philosophers argue, even if (TP) is true, this absurdity does not follow. For, there is no possible world in which Mr. McEar exists. Edward Wierenga (1989), for example, contends as follows:

Necessarily, scratching one's ear takes time. Accordingly, it is necessary that there are infinitely many intervals of time t such that anyone who is able to scratch his ear is also able to scratch his ear throughout t . So if McEar is able to scratch his ear, he is able to do infinitely many things. Moreover, if McEar can scratch his ear, he must be able to do so by moving some other part of his body, perhaps his arm, in the appropriate way. But then McEar can also move his arm, contract his muscles, disturb adjacent air molecules, and do countless other things as well. So it does not seem possible that there be such a being as McEar.

(1989, p. 29)

Wierenga is correct in saying that it is metaphysically impossible for Mr. McEar to exist, given that the task of scratching his ear itself involves complicated procedures. However, at the same time, it is not at all obvious that there can never be a primitive being that is necessarily able to perform only one very simple task or no task at all.

Suppose that this sort of being *is* possible. Does it then immediately follow from (TP) that this being is omnipotent?¹⁷

(TP) says that the fact that God does not have a power to do what it is necessarily impossible to do does not undermine His omnipotence. As I stated earlier, if (TP) is true then it should be applied to other beings, like Mr. McEar and us, as well. Thus (TP) can be generalised as follows:

(TP') For any agent x , the fact that x does not have a power to do what it is necessarily impossible to do does not undermine x 's omnipotence.

Now there are two possible interpretations of (TP'):

(TP'1) For any agent x , the fact that x does not have a power to do what it is necessarily impossible *for x* to do does not undermine x 's omnipotence.

(TP'2) For any agent x , the fact that x does not have a power to do what it is necessarily impossible *for anyone* to do does not undermine x 's omnipotence.

If we adopt (TP'1), then a primitive being, called Ms. X, who can necessarily perform only one very simple task, k , *is* indeed omnipotent. She can only perform k and there are many other tasks, such that others can perform them but Ms. X cannot. Nevertheless, according to (TP'1), this fact does not undermine her omnipotence because they are necessarily impossible *for her* to perform. However, (TP'1) does not seem compelling. As we saw earlier, the motivation for holding (TP) is to block an argument against omnipotence that appeals to, for instance, God's inability to draw a square circle. God does not have to be able to do it precisely because it is what *no one can do*, even in principle. Thus, the tasks to which (TP') applies are those that are necessarily impossible,

not just for a particular being, but for any being at all, to perform. Therefore, (TP'2) seems to be the correct interpretation of (TP'), and if we adopt (TP'2), then clearly, neither Mr. McEar nor Ms. X, who cannot do many things that others can do, is regarded as omnipotent.

There is, however, an apparent drawback to my argument. Judaeo-Christian philosophers often prefer (TP'1) to (TP'2) because if they accept (TP'1) they can show that even if God cannot, for example, kill someone or break a promise His omnipotence is not thereby undermined. For, according to them, given His necessary omnibenevolence, killing someone or breaking a promise is necessarily impossible *for Him* to do.¹⁸ However, this line of reasoning is costly because it conflicts with our commonsense notion of power.

Suppose that necessarily Ms. X can perform only task *k1* and that necessarily Dr. Y can perform tasks *k1* and *k2* but nothing else. In this case, it is natural to claim that Dr. Y is more powerful than Ms. X because, numerically, Dr. Y has more abilities than Ms. X. However, if we adopt (TP'1), Ms. X and Dr. Y are both omnipotent because both of them can do everything except what is necessarily impossible for them to do. And this entails the absurdity that, even though Dr. Y can perform numerically more tasks than Ms. X, they are as powerful as each other! The upshot is that it seems better to think that (RTP) is based not on (TP'1), but on (TP'2), which does not entail that a being that is obviously non-omnipotent is omnipotent.

At this point, one might claim that if (TP'2) is the correct interpretation (RTP) cannot be applied to Nagel's antiphysicalist argument. For, while knowing what it is like to be a

bat is necessarily impossible *for a human being*, it is possible *for a bat*. I now examine this objection.

Objection B: Is It Really a Pseudo Task?

One might try to reject my argument by claiming that Nagel's bat argument does not involve a pseudo task. Drawing a square circle or making a married bachelor are clearly pseudo tasks because no one can perform them. However, according to this objection, knowing what it is like to be a bat is not a pseudo task because, by definition, at least a bat can perform it. And if it is not a pseudo task, then I cannot undermine Nagel's argument by using (RTP).

However, this objection is based on a misunderstanding. I have not claimed that knowing what it is like to be a bat is a pseudo task. As Nagel himself allows, not only a bat, but even we could know what it is like to be a bat if we transformed ourselves into bats or transplanted bats' neural system into our bodies. My complaint is rather that, given the premises of Nagel's bat argument, bringing about the following is a pseudo task:

(6) Nagel (a human being) knows what it is like for a bat to be a bat.

If the premises of the bat argument are true, in order for Nagel to bring about (6) he has to do the following two things at the same time: be a human being and know what it is like for a bat to be a bat. If Nagel fails to do either of them, he fails to bring about (6). However, while being a human being entails being a *non-bat-type* creature, knowing what it is like for a bat to be a bat requires, if Nagel is right, being a *bat-type* creature.

Hence, in order to bring about (6) Nagel has, essentially, to do the following two things at the same time: *be a non-bat-type creature and be a bat-type creature*. This is as necessarily impossible as, say, being married and being a bachelor at the same time or being a chocolate cake and being Socrates at the same time. Although knowing what it is like to be a bat is possible for a bat and for us, knowing what it is like to be a bat while being a non-bat-type creature is clearly necessarily impossible, *even for a bat*.

Objection C: This is Not Nagel's Argument

Finally, one might claim that my argument is unacceptable because I have not correctly interpreted Nagel's bat argument. According to this objection, Nagel's argument does not involve a pseudo task because he does not maintain that it is *necessarily impossible* for a non-bat-type creature to know what it is like to be a bat. If it is not necessarily impossible, then, contrary to my supposition, bringing about (6) is not indeed a pseudo task.

It is true that Nagel does not explicitly claim that it is necessarily impossible for a non-bat-type creature to know what it is like to be a bat, but if Nagel does not endorse the claim, his entire argument will be trivial.

I have taken the intermediate conclusion of Nagel's bat argument to be the following:

(3) If x is not a bat-type creature, then x cannot know what it is like to be a bat.

However, according to the objection under consideration, the real intermediate conclusion is as follows:

(3') If x is not a bat-type creature, then it is *difficult* for x to know what it is like to be a bat.

But, after all, who would deny that it is *difficult* for a non-bat-type creature like us to know what it is like to be a bat? (3') is so weak that it fails to show anything about the cogency or otherwise of physicalism and its alternatives. Given (3') physicalists would hope that a future theoretical revolution within physicalism will enable us to know what it is like to be a bat.¹⁹ And, by the same token, dualists, would claim that it is not physicalism but dualism that will enable us to know what it is like to be a bat. Further, some other antiphysicalists, such as mysterians, would claim that while it is possible in principle for *some* non-bat creatures to know what it is like to be a bat, at least *we* are cognitively bounded with respect to this knowledge.

Nagel summarises his main claim as follows: 'physicalism is a position we cannot understand because we do not at present have any conception of how it might be true' (1974, p. 176). However, this conclusion cannot be derived from (3') without presupposing that physicalism is true. And, as I have stated, (3') is completely silent about the cogency or otherwise of physicalism. All it says is that it is *difficult* for us to know what it is like to be a bat, a thesis which does not have any significant impact on physicalism or its alternatives. Hence, if (3') is the conclusion then, while it does not involve a pseudo task, Nagel's bat argument turns out to be trivial.

VIII. Conclusion

Most philosophers have taken it for granted that Nagel's argument raises an important

issue for physicalism. However, I have shown that there is a fundamental problem with his argument, which is that he tries to derive an apparent difficulty for physicalism by appealing to necessary impossibilities. Whether or not we can characterise the subjective nature of a bat's phenomenal experience in physical terms is a genuine philosophical question, one that might lead to a powerful objection to physicalism. But the necessary impossibility of our knowing what it is like to be a bat, while being ourselves, does not count against the case for physicalism.²⁰

Apart from their names(!), there is no obvious connection between Thomas Nagel's philosophy of mind and Thomas Aquinas's philosophy of religion. However, as I have argued, Aquinas's principle regarding divine omnipotence provides an effective argument against Nagel's challenge to physicalism.²¹

REFERENCES

- Akins, Kathleen 1993a. 'What Is It Like To Be Boring and Myopic?' In Bo Dahlbom (ed.) 1993. *Dennett and His Critics*. Oxford: Blackwell.
- Akins, Kathleen 1993b. 'A Bat Without Qualities?' In Martin Davies and Glyn W. Humphreys (eds.) 1993. *Consciousness: Psychological and Philosophical Essays*. Oxford: Blackwell.
- Alter, Torin 2002. 'On Two Alleged Conflicts Between Divine Attributes.' *Faith and Philosophy* 19, pp. 47-57.

- Anderson, C. Anthony 1984. 'Divine Omnipotence and Impossible Tasks: An Intensional Analysis.' *International Journal for Philosophy of Religion* 15, pp. 109-124.
- Aquinas, Thomas 1259-1264 (1975). *Summa Contra Gentiles*. James F. Anderson (trans.). Notre Dame: University of Notre Dame Press. Excerpt reprinted in Eleonore Stump and Michael J. Murray (eds.) 1999. *Philosophy of Religion: The Big Questions*. Oxford: Blackwell. Page references to reprinting.
- Aquinas, Thomas 1266-1273 (1967). *Summa Theologiae*. Thomas Gilby (trans.). London: Eyre and Spottiswoode.
- Conee, Earl 1991. 'The Possibility of Power Beyond Possibility.' In James Tomberlin (ed.) 1991. *Philosophical Perspectives: 5 Philosophy of Religion*. Atascadero, California: Ridgeview Publishing Company.
- Côté, Antoine 1998. 'God and the Principle of Non-Contradiction.' *International Philosophical Quarterly* XXXVIII, pp. 285-298.
- Groarke, Louis 2001. 'Reconsidering Absolute Omnipotence.' *Heythrop Journal* XLII pp. 13-25.
- Dennett, Daniel C. 1991. *Consciousness Explained*. Boston: Little Brown and Company.
- Descartes, René 1970. *Philosophical Letters*. Anthony Kenny (ed.). Oxford: Clarendon Press.
- Etzkorn, Gerald and Francis Kelly (eds.) 1979. *Ockham: Opera Theologica, vol. 4*. St Bonaventure, NY: Franciscan Institute.

- Flint, Thomas P. and Alfred J. Freddoso 1983. 'Maximal Power.' in Alfred J. Freddoso (ed.) 1983. *The Existence and Nature of God*. Notre Dame: University of Notre Dame.
- Foss, Jeff. E. 1989. 'On the Logic of What It Is Like To Be a Conscious Subject.' *Australasian Journal of Philosophy* 67, pp. 305-320.
- Foss, Jeff. E. 1993. 'Subjectivity, Objectivity, and Nagel on Consciousness.' *Dialogue* 32, pp. 725-736.
- Frankfurt, Harry 1964. 'The Logic of Omnipotence.' *Philosophical Review* 73, pp. 262-263.
- Frankfurt, Harry 1977. 'Descartes on the Creation of the Eternal Truths.' *Philosophical Review* 86, pp. 36-57.
- Geach, Peter 1973. 'Omnipotence.' *Philosophy* 48, pp. 7-20.
- Goldstick, Danny 1990. 'Could God Make a Contradiction True?.' *Religious Studies* 26, pp. 377-387.
- Haksar, Vinit 1981. 'Nagel on Subjective and Objective.' *Inquiry* 24, pp. 105-114.
- Hoffman, Joshua and Gary Rosenkrantz 1980. 'What an Omnipotent Agent Can Do.' *International Journal for Philosophy of Religion* 11, pp. 1-19.
- Hoffman, Joshua and Gary Rosenkrantz 1988. 'Omnipotence Redux.' *Philosophy and Phenomenological Research* 49, pp. 283-301.
- Jackson, Frank 1982. 'Epiphenomenal Qualia.' *Philosophical Quarterly* 32, pp. 127-136.
Reprinted in Ludlow, Nagasawa and Stoljar forthcoming.
- Jackson, Frank 1986. 'What Mary Didn't Know.' *Journal of Philosophy* 83, pp. 291-295.
Reprinted in Ludlow, Nagasawa and Stoljar forthcoming.

- Kekes, John. 1977. 'Physicalism and Subjectivity.' *Philosophy and Phenomenological Research* 37, pp. 533-536.
- Kripke, Saul A. 1972. *Naming and Necessity*. Cambridge, MA: Harvard University Press.
- La Croix, Richard R. 1984. 'Descartes on God's Ability to Do the Logically Impossible.' *Canadian Journal of Philosophy* 14, pp. 455-475.
- Lewis, David 1983. 'Postscript to "Mad Pain and Martian Pain".' In David Lewis 1983. *Philosophical Papers*, Vol. 1. Cambridge: Cambridge University Press.
- Lewis, David 1988. 'What Experience Teaches.' In J. Copley-Coltheart (ed.) 1988. *Proceedings of the Russellian Society*. Sydney: University of Sydney. Reprinted in Ludlow, Nagasawa and Stoljar forthcoming.
- Ludlow, Peter, Yujin Nagasawa and Daniel Stoljar forthcoming. *There is Something About Mary: Essays on Frank Jackson's Knowledge Argument*. Cambridge, MA: MIT Press.
- Mackie, J. L. 1955. 'Evil and Omnipotence.' *Mind* LXV, pp. 200-212.
- Mavrodes, George I. 1963. 'Some Puzzles Concerning Omnipotence.' *Philosophical Review* 72, pp. 221-223.
- Mavrodes, George I. 1977. 'Defining Omnipotence.' *Philosophical Studies* 32, pp. 191- 202.
- McGinn, Colin 1999. *Mysterious Flame*. New York: Basic Books.
- McMullen, Carolyn 1985. "'Knowing What It's Like" and the Essential Indexical.' *Philosophical Studies* 48, pp. 211-233.
- McTaggart, John Ellis 1906. *Some Dogmas of Religion*. London: Edward Arnold.
- Mellor, D. H. 1993. 'Nothing Like Experience.' *Proceedings of the Aristotelian Society* 63, pp. 1-16.

- Miller, Leonard G. 1957. 'Descartes, Mathematics, and God.' *Philosophical Review* 66, pp. 451-465.
- Nagel, Thomas 1974. 'What Is It Like To Be a Bat.' *Philosophical Review* 83, pp. 435-450.
- Nagel, Thomas 1986. *The View From Nowhere*. New York: Oxford University Press.
- Nemirow, Lawrence 1980. 'Review of Nagel's *Mortal Questions*.' *Philosophical Review* 89, pp. 473-477.
- Nemirow, Lawrence 1990. 'Physicalism and the Cognitive Role of Acquaintance.' In William G. Lycan (ed.) 1990. *Mind and Cognition: A Reader*. Oxford: Blackwell.
- Pereboom, Derek 1994. 'Bats, Brain Scientists, and the Limitation of Introspection.' *Philosophy and Phenomenological Research* 54, pp. 315-329.
- Plantinga, Alvin 1967. *God and Other Minds*. Ithaca, NY: Cornell University Press.
- Plantinga, Alvin 1980. *Does God Have a Nature?* Milwaukee: Marquette University Press.
- Reichenbach, Bruce R. 1980. 'Mavrodes on Omnipotence.' *Philosophical Studies* 37, pp. 211-214.
- Shestov, Leon 1962. 'In Memory of a Great Philosopher: Edmund Husserl.' George L. Kline (trans.). *Philosophy and Phenomenological Research* XXII.
- Stoljar, Daniel 2000. 'Physicalism and Necessary A Posteriori.' *Journal of Philosophy* XCVII, pp. 33-54.
- Swinburne, Richard 1977. *The Coherence of Theism*. Oxford: The Clarendon Press.
- Tilghman, B. R. 1991. 'What Is It Like To Be an Aardvark?' *Philosophy* 66, pp. 325-38.
- Trakakis, Nick 1997. 'The Absolute Theory of Omnipotence.' *Sophia* 36, pp. 55-78.

Van Gulick, Robert 1985. 'Physicalism and the Subjectivity of the Mental.' *Philosophical Topics* 13. pp. 51-70.

Van Gulick, Robert 1993. 'Understanding the Phenomenal Mind: Are We All Just Armadillos?' in M. Davies and G. W. Humphreys (eds.) *Consciousness: Psychological and Philosophical Essays*. Oxford: Blackwell.

Wielenberg, Erik J. 2000. 'Omnipotence Again.' *Faith and Philosophy* 17, pp. 26-43.

Wierenga, Edward 1983. 'Omnipotence Defined.' *Philosophy and Phenomenological Research* 43, pp. 363-375.

Wierenga, Edward 1989. *The Nature of God: An Inquiry into Divine Attributes*. Ithaca, NY: Cornell University Press.

¹ See, for example, Lewis (1983), McMullen (1985), and Pereboom (1994).

² See, for example, Alter (2002), and Pereboom (1994).

³ See, for example, Akins (1993a; 1993b), Foss (1989; 1993), Haksar (1981), Kekes (1977), Lewis (1983; 1988), McMullen (1985), Mellor (1993), Nemirow (1980; 1990), Tilghman (1991), and Van Gulick (1985, 1993).

⁴ (4) is true of metaphysical necessity. However, the question is whether or not (1) and (2) are also true of metaphysical necessity. If (1) and (2) are both true of metaphysical necessity then (3) and (5) are also true of metaphysical necessity. On the other hand, if either (1) or (2) is not true of metaphysical necessity, but say, only nomological necessity, then (3) and (5) are not guaranteed to be true of metaphysical necessity. Throughout this paper, I present my argument so that it does not rely on the status of these necessities. However, if either (1) or (2) is not true of necessity at all, then (3) and (5) are not guaranteed to be true of necessity either. In this case my argument *appears* to be in trouble. I come back to this point in Section VII.

⁵ Whether or not, apart from a bat itself, there really is such a creature is not our concern here.

⁶ In what follows, I use phrases 'what it is like to be a bat' and 'what it is like for a bat to be a bat' interchangeably.

⁷ If Nagel can transform from a human being into a bat and then into a human being again, while preserving his memory, then perhaps Nagel, as a human being, can know what it is like for a bat to be a bat; but I take it that Nagel does not regard that as a possibility.

⁸ One might also expand Nagel's bat argument in the following way: the bat argument shows that we cannot know what it is like to be a bat. Therefore, we cannot provide a complete physical explanation of what it is like to be a bat, for we do not know what needs to be explained in the first place! In this case, however, Nagel's argument has an impact only on the epistemological status of physicalism. Thus, it entails what we may call mysterianism, according to which phenomenal consciousness is not ontologically but only epistemologically distinct from the physical. However, Nagel himself argues that he is 'not raising [an] epistemological problem' with his argument (1974, p. 442).

⁹ (14) says that Nagel *cannot* know what it is like to be a bat, but in order to derive the conclusion of the antiphysicalist argument, (16), Nagel needs only the weaker claim that Nagel *does not* know what it is like to be a bat. That is, (14), which is the conclusion of the bat argument, is unnecessarily strong. I believe that this is what makes his antiphysicalist argument problematic. Those who are familiar with Jackson's Knowledge Argument should notice that the Knowledge Argument uses only the weaker claim.

¹⁰ For issues of *a posteriori* physicalism see Stoljar (2000).

¹¹ Since the issue of defining omnipotence is enormously controversial, I do not attempt to provide a precise definition here. I try to minimise the dependence of my argument on a particular definition of omnipotence. For various attempts to define omnipotence see, for instance, Hoffman and Rosenkrantz (1980; 1988), Mavrodes (1977), Wielenberg (2000), and Wierenga (1983).

¹² The issue of whether or not God can do what it is necessarily impossible to do is not entirely uncontroversial. For instance, many philosophers claim that Descartes endorses the doctrine of absolute omnipotence according to which if God exists He is (or has to be) able to do what it is necessarily impossible

to do (Frankfurt (1964, 1977), Geach (1973), Goldstick (1990), Miller (1957), Plantinga (1980), Trakakis (1997)).

The following passage is said to represent Descartes' view:

I do not think that we should ever say of anything that it cannot be brought about by God. For since everything involved in truth and goodness depends on His omnipotence, I would not dare to say that God cannot make a mountain without a valley, or that one and two should not be three. I merely say that He has given me such a mind that I cannot conceive a mountain without a valley, or an aggregate of one and two which is not three, and that such things involve a contradiction in my conception. (1970, pp. 236-237. See also pp. 11-12, pp. 14-15, pp. 150-151, pp. 236-237, pp. 240-241).

However, La Croix (1984) argues that Descartes does not mean to claim that God can really turn necessary impossibilities into possibilities. For the debate on whether Descartes really subscribes to the doctrine of absolute omnipotence see Frankfurt (1964, 1977), and La Croix (1984). Other philosophers who endorse the doctrine of absolute omnipotence include: Conee (1991), Goldstick (1990), Mackie (1955), McTaggart (1906), and Shestov (1992). For issues about the doctrine of absolute omnipotence see Conee (1991), Côté (1998), Goldstick (1990), Groarke (2001), and Trakakis (1997).

¹³ Richard Swinburne makes a similar point in terms of action: 'A logically impossible action is not an action. It is what is described by a form of words which purport to describe an action but do not describe anything which it is coherent to suppose could be done.' (1977, p. 231). It is interesting to note that pseudo tasks are not always easily distinguishable from real tasks. For instance, the Athenian and Cyzician schools were trying to solve the duplication of a cube, the trisection of an angle and the squaring a circle. However, all of them turned out to be necessarily insoluble. That is, while they had believed (or hoped) that they could solve them, solving these problems was found to be a pseudo task (Anderson (1984), p. 113).

¹⁴ Here I simply mean that the proposition expressed by (19) is necessarily false.

¹⁵ One might argue that this argument against Judaeo-Christian theism is based on the wrong assumption that there are some cut-and-dried rules about what is allowed in rejecting religious belief, which, of course, there are not. However, I take it that this argument is merely intended to undermine contemporary rational

theism according to which there is a sound argument for the existence of God but there is not a sound argument against the existence of God. I am indebted to anonymous referee for *Inquiry* on this point.

¹⁶ One might argue that God *can* know what it is like to be a bat if he incarnates as a bat. However, this results in the trouble that we discussed in Section II. That is, by incarnating as a bat, God can bring about only the following: God (*as a bat*) can know what it is like for a bat to be a bat. This is crucially different from the claim that God (*as God*, that is, *as a non-bat-type being*) knows what it is like for a bat to be a bat.

¹⁷ Thomas P. Flint and Alfred J. Freddoso (1983, n. 4) make the following interesting historical remarks:

To best of our knowledge, McEar makes his first contemporary appearance in Alvin Plantinga's *God and Other Minds* (Ithaca, 1967), pp. 168-73. But a similar difficulty was recognized at least as early, as the later Middle Ages. For instance, the following note was added by an anonymous writer to one of the manuscripts of Ockaham's *Ordinatio* I, distinction 42: "Nor is a being said to be omnipotent because he can do all things which are possible for him to do ... since it would follow that a minimally powerful being is omnipotent. For suppose that Socrates performs one action and is not capable of performing any others. Then one argues as follows: 'he is performing every action which it is possible for him to perform, therefore, he is omnipotent'" (See Etzkorn and Kelly (1979), p. 611).

It is worthy of note that the formulation of the McEar problem in the Middle Ages is much less susceptible to criticism than the modern formulation.

¹⁸ Some theists argue that they do not have to give up omnibenevolence of God even if they hold (TP'2). For, they say, the general thrust of (TP) is directed only to metaphysical necessity and it is not metaphysically, but only morally, impossible for God to kill someone. That is, God *can* kill someone, but he just does not.

¹⁹ In fact, Nagel himself (1974) is inclined to bet on this possibility. He argues that perhaps contemporary physicalists' hypothesis that a mental event is a physical event is analogous to the pre-Socratics' hypothesis that matter is energy (p. 447). Just as pre-Socratic philosophers needed a concept that enabled them to understand how matter could ever be energy, according to Nagel, perhaps we need a concept that enables

us to understand how a bat's phenomenal experience can ever be physical. But as I mentioned earlier, Nagel rejects physicalism in his later book (1986).

²⁰ As I noted in the main text many philosophers contend that Nagel's argument is, at its root, identical to Jackson's Knowledge Argument. However, Jackson clearly distinguishes his argument from Nagel's by taking a similar line of reasoning to mine:

When I complained that all the physical knowledge about Fred was not enough to tell us what his special colour experience was like, I was not complaining that we weren't finding out what it is like to *be* Fred. I was complaining that there is something *about* his experience, a property of it, of which we were left ignorant. And if and when we come to know what this property is we still will not know what it is like to *be* Fred, but we will know more about him. No amount of knowledge about Fred, be it physical or not, amounts to knowledge "from the inside" concerning Fred. We are not Fred. There is thus a whole set of items of knowledge expressed by forms of words like 'that it is *I myself* who is ...' which Fred has and we simply cannot have because we are not him. (1982, p. 132)

²¹ A version of this paper was given at the ANU Philosophy Society in Canberra in 2002. I would like to thank all in the audience including Karen Bennett, Campbell Brown, Daniel Cohen, Frank Jackson, Mitchell Joe, Laura Schroeter, and Michael Smith. I am especially grateful to Martin Davies, Daniel Stoljar and an anonymous referee for *Inquiry* for helpful suggestions and generous remarks.