

## A Novel Reading of Thomas Nagel’s “Challenge” to Physicalism

Serdal Tmkaya\*

Received: 12 June 2020 / Accepted: 18 November 2020


*Abstract:* In passing remarks, some commentators have noted that for Nagel, physicalism is true. It has even been argued that Nagel seeks to find the best path to follow to achieve future physicalism. I advance these observations by adding that for Nagel, we should discuss the consciousness problem not in terms of physical and mental issues but in terms of our desire to include consciousness in an objective/scientific account, and we can achieve this only by revising our self-conception, i.e., folk psychology, to develop a more detached view of experience. Through the project of objective phenomenology, Nagel aims to achieve some sort of objective, detached, and scientific explanation of the subjective nature of experience. This project seeks to make the truth of physicalism intelligible and consciousness more amenable to scientific study, potentially raising an even broader concept than the one physicalism originally proposes.

*Keywords:* Folk psychology; Nagel; objective phenomenology; physicalism; science of consciousness.

---

\* Middle East Technical University and Ardahan University

 <https://orcid.org/0000-0002-2453-4184>

 Ardahan University Yenisey Kamps, amlıatak, Ardahan Department of Philosophy, 75002 Ardahan, Turkey.

 [serdal82@gmail.com](mailto:serdal82@gmail.com)

## 1. Introduction

“[P]hysicalism ... repels me although I am persuaded of its truth.” (Nagel 1965, 356)

Thomas Nagel has been claimed (i) to argue against physicalism (e.g., Thomas 2009; Sundström 2002), (ii) to have changed his position from physicalism to nonphysicalism and later to anti-physicalism from 1965 to 1998 (e.g., Nagasawa 2003, 377; cf. Foss 1993, 726) or from 1986 to 2012 (Seager 2014, 10, n12), and (iii) to deny the possibility of giving an objective account of consciousness (e.g., Dennett 1991, 71; Bond 2005, 129–30; McHenry and Shields 2016, 497).<sup>1</sup> Some commentators have noted that Nagel does not in fact claim that physicalism is false (D’Oro 2007, 170). For example, Seager asserts that

Nagel is officially agnostic about the truth of physicalism, or even leans towards accepting it, but takes it for granted that absent a plausible route towards establishing reductive epistemological dependence, arguments in favour of a physicalist solution to the mind-body problem are just ‘sidestepping it’. (Seager 2014, 10)

In an associated note (n12) on the same page, he adds that “At least, that was true at the time Nagel wrote the famous bat paper and in Nagel (1986); he seems to have definitively rejected physicalism in his latest work, Nagel (2012).” As he says, it is also possible to think of Nagel as leaning toward accepting physicalism.

On rare occasions, it has been acknowledged that he tends to believe that physicalism is true but is still suspicious of its sufficiency. Tim Crane observed that “Nagel’s view was that physicalism is true, but that we cannot fully understand it” (2007, 23). More importantly, Stubenberg argues that Nagel wants to clear the path for a future physicalism (see his 1998). I further their observation by adding that for Nagel we should discuss the consciousness problem not in physical and mental terms but from our desire to include consciousness in an objective/scientific account and that we can achieve this only by revising our self-conception, i.e., folk psychology, to develop a more detached view of experience.

---

<sup>1</sup> See section 3 for many other references.

Through the project of objective phenomenology, Nagel aims to achieve some sort of objective, detached, and scientific explanation of the subjective aspect of experience (1986, chaps. 1–2, see also 1974, 449). The project intends to make the truth of physicalism intelligible and consciousness more amenable to scientific study.

This article places Thomas Nagel's ideas regarding physicalism in the context of his proposal for objective phenomenology. In fact, a detailed discussion of the objective phenomenology project provides the basis for Nagel's lesser known critique of folk psychology. Unfortunately, a large majority of the literature on the philosophy of mind focused on Nagel is silent with respect to his austere criticisms of the deficiencies of our self-conception.<sup>2</sup> Once we understand this triangular relationship, it is much easier to understand that embracing physicalism is quite compatible with Nagel's general framework. Though Nagel has said that "consciousness is what makes the mind–body problem really intractable" (1974, 435), the objective phenomenology project is meant to make it tractable within a physicalist framework. It is true that consciousness is obstinate to an objective characterization, but it is not impossible to remove its resistance if we sufficiently revise our current framework of folk psychology (Nagel 1993, 2002). Let me start by providing initial definitions for consciousness and folk psychology before discussing the relationships between them.

Whatever else consciousness is, it is typically presented as something unitary, accessible to the privileged first-person view, intentional, and qualitative. Folk psychology is, roughly, the framework underlying generalizations made by lay people to understand and predict the behaviors of other people and their own behaviors. It also reflects the familiar conception of mind that ordinary people endorse, and this conception infiltrates the usual language of philosophers of mind when they talk about consciousness. Through this envisaged revision in folk psychology, physicalism's seeming wanting disappears, as our standards to judge the soundness of any physicalist theory will change. Thus, physicalism lives up to our expectations. The naïve preconception of the mind and body is restructured. The

---

<sup>2</sup> Nagel uses the terms "folk psychology," "our self-conception," "standard mentalistic idioms," and "traditional conception of mind" interchangeably. This is not a problem of content, but it might be confusing for readers.

ossified conception of the mind fails to adapt to new knowledge that we have gained about the deficiencies of our self-conception and is likely to be significantly updated and may die out (see Nagel 1998). We shall discuss these points in the following sections.

## 2. Nagel embraces physicalism

“I am inclined to believe that some weak physicalist theory of the third type is true ...” (1965, p. 340)

Physicalism is one of the most protean terms developed in recent philosophy. There are thousands of philosophers who are physicalist from one point of view, but anti-physicalist from another. For some, physicalism suggests that phenomenal consciousness is an illusion. More accurately, “if physicalism is true, phenomenal consciousness must be an illusion” (Tartaglia 2016, 236). For others, we can and should be realists about our experiences but also physicalists of some sort. For instance, Nagel describes Galen Strawson as a materialist of an anti-reductionist type and a realist about experience:

However, Strawson is a materialist and does not think that your self could exist apart from your central nervous system. He holds that your experiences are events in your brain, and that if there is a self which is their subject it too must be in the brain. But he is a materialist of an unusual kind: a realist about experience and an anti-reductionist. (Nagel 2009)

Strawson is a realist about experience and an anti-reductionist on the mind–body problem as Nagel is. Despite this, Nagel says that Strawson is an unusual kind of materialist. According to this line of reasoning, Nagel should call himself a physicalist. This is not unexpected, since contrary to what so many philosophers believe, Thomas Nagel tends to believe that a *weaker* form of physicalism is *true* (1965, 340&356). Strong physicalism represents a type identity theory for him. The right alternative is some sort of token physicalism. This reflects a strong version of token materialism and is occasionally referred to as neutral monism or dual-aspect theory (or even

pansychism once upon a time) by him (2012, 4–5; cf. Pernu 2017, 6).<sup>3</sup> For him, the mental is strictly dependent on the physical:

The mind-brain case seems a natural candidate for such treatment because what happens in consciousness is pretty clearly supervenient on what happens physically in the brain. In the present state of our conceptions of consciousness and neurophysiology, this strict dependence is a brute fact and completely mysterious. (Nagel 2002, 207)

Nagel says that "Materialism is the currently dominant form of reductionism, and it reduces the mental to the physical via the reduction of the mental to the biological" (Nagel et al. 2016, 394). When he uses the word materialism as shorthand for "reductive physicalism" or for specific forms of "naturalism," he rejects it. He dismisses them on the grounds that they leave something important about consciousness unexplained. He sometimes claims that mentalistic concepts are indispensable (see, e.g., 2016, 400) and at other times seriously entertains the idea that all of our mentalistic concepts with all the principles of our self-conception will not survive the next century *intact* (1998).

This brings us to a difficult question: is physicalism true for Nagel or not? He sometimes argues that mentalistic language is indispensable but at other times contends that physicalism must be true. Some philosophers see an equivocation between the two notions of physicalism illustrated in Nagel's publications, as Torin Alter notes (but mistakenly rejects):

There are other ways to interpret Nagel's view in WLBB [1974] about the status of physicalism. For example, one possibility is that he equivocates on "physicalism": in some places he uses the term to refer to certain reductionist theories that he outright rejects, and in others he uses it to refer to physicalist theories that he believes are compatible with S and possibly true.<sup>4</sup> (Alter 2002, 155, n11)

---

<sup>3</sup> McGinn noted that "Something close to anomalous monism is tentatively endorsed by Thomas Nagel in 'Physicalism'" (1980, 202, n3).

<sup>4</sup> S denotes the general principle that "Experiences are subjective: understanding their true nature requires having or imaginatively adopting the viewpoint of the experiencing creature" (2002, 147).

By blurring the distinctions between materialism as such, reductive physicalism, and naturalism, Nagel causes considerable confusion for his readers. We must first remedy this confusion. We will start with physicalism, continue with objectivity, and end with folk psychology. My argument, as a first approximation, can be summarized as follows. Due to conspicuous deficiencies of folk psychology, i.e., our self-conception, it is difficult for us to imagine that mental states are physical states and that physicalism is true. The objective phenomenology project offers the capacity to make this truth intelligible.

Nagel tries to teach us to think of physicalism problem in terms of the objective–subjective relationship. This relationship is not a polarized one but shows gradation. Moreover, the two sides of the relation are parts of a continuum (see section 3). We have evidence that physicalism is true, but we do not know how and why it is true: “... I think we also have some reason to believe that sensations are physical processes, without being in a position to understand how” (1974, 448). We do not fully know its nature. What he argues against are *certain* sorts of physicalism as follows: scientific, reductionist, and functionalist ones (Nagel 2002). He levels charge against these versions of physicalism; an approach based upon common sense, assuming the possibility of logical reductionism, granting the correctness of our self-conception, rather than explaining subjective aspects of experience ignoring it (Nagel 1965, 1970).

The point for Nagel, as stated above, is not physicalism as such but the objectivity problem:

We cannot genuinely understand the hypothesis that their nature is captured in a physical description unless we understand the more fundamental idea that they have an objective nature (or that objective processes can have a subjective nature). (1974, 448) (*Italics original*)

In the debate over consciousness, Nagel should be regarded as a nonsubjectivist: “My aim is to clarify and explore this question and to try, for certain domains of thought, to defend what I shall call a rationalist answer against what I shall call a subjectivist one” (1997, 3). Nagel stipulates that if something is physical, then it must be objective (1974, 449, fn 15). In addition, he, in his 1965 article entitled “Physicalism,” explicitly states that

a weaker form of physicalism is likely to be true. However, it would be better, he argues in "What is It Like to Be a Bat?" (1974) and "Conceiving the Impossible and the Mind-Body Problem" (1998), to conceptually revise our mentalistic ideas. Hence, we should see him as a *revisionary* materialist (cf. Allen-Hermanson 2015, 59–63; cf. Bickle 1992, 1998, chap. 6; cf. Sundström 2018).

Let us proceed to see what the problem is with folk psychology. Below is Nagel's surprisingly harsh criticism of it based on the fact that our mentalistic ideas have naturally evolved through nonscientific functions. He then goes on saying that:

Our dealings with and declarations to one another require a *specialized* vocabulary, and although it serves us moderately well in *ordinary* life, its *narrowness* and *inadequacy* as a psychological theory become evident when we attempt to apply it in the formulation of general descriptions of human behavior or in the explanation of abnormal mental conditions. (1970, 399; for similar reasons, see, e.g., P. S. Churchland 1986, 223) (Italics added)

From this it follows that our mentalist picture is insufficient for a general account of human behavior and cognition, though it is enough for daily transactions. However, we should desire a sufficient account. Then, the mentalist picture should be improved by unending revisions for the following reason:

The crude and incomplete causal theory embodied in commonsense psychology should not be expected to *survive* the next hundred years of central nervous system studies intact. It would be surprising if concepts like belief and desire found correspondents in a neurophysiological theory, considering how limited their explanatory and predictive power is, even for gross behavior. (1970, 399) (Italics added)

This passage reflects explicitly a powerful critique of folk psychology focusing on concepts of belief and desire. It emphasizes the explanatory limitations and predictive weaknesses of folk psychology regarding even gross behavior. It claims that future brain science would not match our current self-conception.

The physical behavior which, on Armstrong's analysis, a given intention is apt to cause, may be the product of causes whose complexity cannot be brought into even *rough correspondence* with the simple elements of a present-day psychological explanation. (1970, 399) (*Italics added*)

I can reasonably say that Nagel's objections are not directed against scientific materialism but against folk materialism. He says that the solution lies in "a more advanced theory of human functioning" as follows:

If that is so, then a physicalist theory of human functioning will not take the form of identifications between old-style psychological states and microscopically described physical states of the central nervous system. It will be couched instead in the concepts of *a more advanced theory of human higher functioning*. (1970, 399) (*Italics added.*)

Old psychological concepts will not work in the future. They will become archaic. In a future theory of cognition, we will need novel mental terms and a new objective phenomenological vocabulary.

I hope that this is a sufficient introduction to Nagel's ideas about physicalism, objectivity, and folk psychology. Now let us see which and in what ways philosophers misconceived his position about consciousness.

### 3. How is Nagel misconceived?

Thomas Nagel is probably one of the most-cited living analytic philosophers of the second half of the last century and arguably the most-cited philosopher of mind ever.<sup>5</sup> His arguments are often cited as refuting some or all versions of physicalist theories (Lycan 2003, 186; Avramides 2006, 228–30; Wider 1990; Gorman 2006; Taylor 2016, 78; Thomas 2009, 35), as denying the possibility of giving a naturalistic/objective account of consciousness (Flanagan 1985, 373; Ratcliffe 2002, 353; Bergström 2009, 76; Stoljar 2017, sec. 16), or as showing that the arguments in favor of

---

<sup>5</sup> For his 1974 paper, Web of Science (WoS) citations (as of June 17, 2020): 2,501 counts, from Clarivate.



physicalism are not cogent (Nagasawa 2003, 377). The only two works (in either one of the sections of the respective books) that have somewhat focused on the connection between Nagel's physicalism and his objective phenomenology are (Stubenberg 1998; Thomas 2009). Although Stubenberg argues that the objective phenomenology project is to clear the path for future physicalism (p. 42), Thomas argues that Nagel's nonphysicalism is compatible with his objectivism (p. 38).<sup>6</sup> None of these accounts adequately addresses the relationship between physicalism, objectivity, and massive deficiencies of folk psychology, as Nagel construes them.

Nagel is largely a critical defender of objectivism (see Nagel 1986, 5; Nagel 1974, 449; for a defense of not objectivity but the scientific explanation of mental, see Nagel 2013). If objectivity is naturally associated with the third-person externalist viewpoint, subjectivity is associated with the first-person internal viewpoint. An objective point of view is "a progressive departure from earlier internal views" or subjective view (Boruah 1995, 339). They are not contrasting viewpoints, but "are part of a single spectrum of vision" (1995, 339). These two views are not mutually exclusive. This is why Nagel talks about "mental objectivity" (1986, chap. 2). Before discussing the relationship between his physicalism and the project of objective phenomenology, we should take a closer look at his conception of physicalism.

Nagel's earliest definition of physicalism is "I mean by physicalism the thesis that a person, with all his psychological attributes, is nothing over and above his body, with all its physical attribute" (1965, 339). He is "inclined to believe that some weak physicalist theory of the third type is true" and that "any plausible physicalism will include some state and event identities, both particular and general" (p. 340). The first type is identity theory, and the fourth is something even weaker than the token physicalism.<sup>7</sup> His acknowledging the truth of physicalism is abductive. He has some reasons to believe that some sort of physicalism should be true. He gives no

---

<sup>6</sup> Alan Thomas tends to interpret Nagel's objective phenomenology project in an expressly anti-physicalist manner. The problem is that he does not provide an argument for this and just assumes it.

<sup>7</sup> We should not be perplexed by the labyrinthine complexities of the concept of the physical and of theories of physicalism. These are extraneous to my present discussion.

argument for this. In fact, his problem is not to defend or refute physicalism but just to defeat the then widespread arguments for the conclusion that physicalism must be false.

My attitude toward it is precisely the reverse of my attitude toward physicalism, which repels me although *I am persuaded of its truth*. The two are of course related, since what bothers me about physicalism is the thought that I cannot be a mere physical object, cannot in fact be anything in the world at all, and that my sensations and so forth cannot be simply the attributes of some substance. (1965, 356, cf. 1971, 111) (All but the last italics have been added)

Interestingly, from this passage, we see that Nagel has been a physicalist in as early as 1965; he was persuaded of its truth.<sup>8</sup> Crane claims that the point for Nagel is that we cannot fully understand physicalism. However, this interpretation of Crane is problematic because Nagel does not say that “we cannot understand it ever.” He does not claim that a physicalist account of consciousness cannot be given, only claims that nobody has yet given a plausible account. Thus, there remains a conceptual barrier in front of us.

What Nagel says is that when assuming the available mentalistic conception of human beings, the identity of mind and brain appears impossible to be true. On the other hand, he explicitly acknowledges that some weak form of physicalism is true. The reasonable conclusion thus is that we should revise and expand upon our available set of mentalistic ideas. This is why claiming that Nagel argues for the strict irreducibility of the mental to the physical is in erroneous. Nagel has only argued for conditional conceptual irreducibility given our self-conception, not for categorical irreducibility. Concepts reform, and categorical irreducibility disappears. The unintelligibility of the physicalist account of experience then ends.

In his atypical form of physicalism, the classical distinction between physical and mental becomes obsolete. The subjective-objective relationship

---

<sup>8</sup> In conversation, many people asked me how I happened to be sure that Nagel did not substantially change his attitude toward physicalism in the last half a century. The answer to that question lies in my exposition of his replacement of the physicalism question with the problem of objectivity.

replaces the mental–physical dichotomy (Nagel 1979, 202). However, the notion of objectivity is importantly revised in stages as follows: “The development goes in stages, each of which gives a more objective picture than the one before” (1980, 79). If we can see that the question of physicalism is the problem of objectivity in guise, we can accept that the physicalism problem is not an ontological but a methodological one. This is so since “[O]bjectivity is a method of understanding” (1980, 77). The categories of subjectivity and objectivity replaces the categories of mental and physical. I think that this is key to understanding why Nagel occasionally refers to his approach as neutral monism or dual-aspect theory.

#### 4. The problem of physicalism lies in giving an objective account of the subjective

“... the physical is a substitute for objectivity in posing  
the mind-body problem.” (Nagel 1979, 202)

Pär Sundström notes that many people reject the reading of Nagel 1974 to the effect that consciousness cannot be explained in physicalist terms:

In conversation, I have often met with the claim that Nagel does not try to argue that experience cannot be accounted for in physicalist terms, but merely illustrates an intuition. I think there is something true about this. (2002, 92)

Nagel asserts that “The mind-body problem exists because we naturally want to include the mental life of conscious organisms in a comprehensive scientific understanding of the world” (1993, 1). He “offers a defense and a critique of objectivity” (1986, 5).<sup>9</sup> For Nagel, the core problem lies in how to give an ever increasingly objective account of the subjective.<sup>10</sup>

---

<sup>9</sup> His critique of objectivism is limited to some ambitious claims of some natural scientists who venture fall beyond the scientific spirit and make bold assertions bolstered by a metaphysical worldview (Nagel, 2012, ch. 1). For him, those who choose anti-reductionism over objectivity deserve neither.

<sup>10</sup> By far, the most elaborate version of his objective phenomenology project is presented in his *The View from Nowhere* (1986, chap. II). This does not determine

For Nagel, if something is physical, “it has to be objective” (1974, 449, fn 15, for more on this issue see also 1979, 202). That is, if we are to explain the mental in physical terms, we have to characterize it as something objective. On the other hand, what we need might be mental objectivity (1986, 17). Nonetheless, Nagel anticipates that in the future when relationships between the mental and physical are fully understood, “the fundamental terms” of the theory that explains that relation will not fall squarely with our current categories of physical or mental. That is, for Nagel, the physical account of the mental will remain improbable without “giving much more thoughts” to the general problem of the subjective and objective (1974, 450). In fact, Nagel, in one of his less known works, states that the problem of physicalism is just a substitute for the question of objectivity (1979, 202; for a parallel claim, see Stoljar 2017) as follows:

The physical is an ideal representative for the objective in general; therefore much obscurity has been shed on the problem by faulty analogies between the mental–physical relation and relations between the physical and other objective aspects of reality.

Nagel explores the connection between the physical and the objective. Having a more objective/detached account of consciousness is his desire (1980, 91) because “objectivity is naturally linked with reality” (1979, 202). If the internality of our psychology (i.e., the subjectivity of consciousness) is real, then there must be an objective account of it. Several central philosophical problems in the philosophy of mind are in fact the disguised expressions of the objectivity problem as described below.

As determinism is a substitute for externality or objectivity in posing the problem of free will, so the physical is a substitute for objectivity in posing the mind-body problem. All the disputes over causal role, theoretical identification, and functional realization, while of interest in themselves, fail to give expression to the central issue that makes the mind-body problem so hard. (Nagel 1979, 202)

---

whether the objective account of the subjective aspect of experience can be absolute or complete and whether it is desirable to achieve it maximally (Thomas 2009, 33).

What makes the problem of consciousness intractable, thus, is not that there is a mystery about how the physical gives rise to the mental but our lack of a suitable notion of objectivity. Our current notion of objectivity is confined to pure physical objectivity. It pushes the phenomenal aspect of experience out to the purely subjective side of the debate. The phenomenological aspect of experience should be made amenable to objective exploration. Nagel proposes doing this through his objective phenomenology project. The target of this project is "to clear the path for a future physicalism" (Stubenberg 1998, 42; also see Matthews 2009, 71). This is indeed the case:

Apart from its own interest, a phenomenology that is in this sense objective may permit questions about the physical basis of experience to assume a more intelligible form. Aspects of subjective experience that admitted this kind of objective description might be better candidates for objective explanations of a more familiar sort. (Nagel 1974, 449–50)

This is Nagel's guess. In the future, it is possible to develop an objective phenomenological vocabulary to answer the question: "what is it like to be a bat for a bat?" (see Atkins 2013). Nagel does not deny the possibility of giving an objective account of consciousness. In contrast, he strives for this.

## 5. Concluding remarks

Finally, I must state that most of the things that philosophers say about Nagel have no basis at all in what Nagel actually says about the possibility of giving an objective account of the subjective aspect of experience. Thomas Nagel is not against physicalism as such, but he is against some mistaken forms of it. Nagel acknowledges the truth of weaker forms of physicalism. He does not deny the power of scientific achievements or objective methodology in the examination of philosophical problems, even including the subjective aspect of experience. He is not a subjectivist. Quite the reverse, he claims that we should pursue an unending inquiry to find the objective nature of subjective phenomena. The project of objective phenomenology is proposed for this aim. Nagel has shown us a way to conceive the

consciousness problem in an objective manner. Consciousness *is* something intractable, yet it can be made tractable in a physicalist framework through an objective phenomenology project. It is fallacious to demand a direct answer to such a complex problem as consciousness without first analyzing the basis of the question itself. This is what Nagel did. He challenged the widespread assumption that the problem of consciousness is intractable by its very nature.

### References

- Allen-Hermanson, Sean. 2015. "Strong Neurophilosophy and the Matter of Bat Consciousness: A Case Study." *Erkenntnis* 80 (1): 57–76.  
<https://doi.org/10.1007/s10670-014-9612-2>
- Alter, Torin. 2002. "Nagel on Imagination and Physicalism." *Journal of Philosophical Research* 27: 143–58. [https://doi.org/10.5840/jpr\\_2002\\_28](https://doi.org/10.5840/jpr_2002_28)
- Atkins, Richard Kenneth. 2013. "Toward an Objective Phenomenological Vocabulary: How Seeing a Scarlet Red Is like Hearing a Trumpet's Blare." *Phenomenology and the Cognitive Sciences* 12 (4): 837–58.  
<https://doi.org/10.1007/s11097-012-9288-5>
- Avramides, Anita. 2006. "Thomas Nagel: The View from Nowhere." In *Central Works of Philosophy*, edited by John Shand, 227–46. Buckinghamshire: Acumen.
- Bergström, Lars. 2009. "Thomas Nagel—Recipient of the Rolf Schock Prize in Logic and Philosophy, 2008." *Theoria* 75 (2): 76–78.  
<https://doi.org/10.1111/j.1755-2567.2009.01033.x>
- Bickle, John. 1992. "Revisionary Physicalism." *Biology and Philosophy* 7 (4): 411–30. <https://doi.org/10.1007/BF00130060>
- Bickle, John. 1998. *Psychoneural Reduction: The New Wave*. Cambridge, Mass.: MIT Press. A Bradford Book.
- Bond, E. J. 2005. "Does the Subject of Experience Exist in the World?" *Philosophy and Phenomenological Research* 71 (1): 124–124.  
<https://doi.org/10.1111/j.1933-1592.2005.tb00433.x>
- Boruah, Bijoy. 1995. "The Non-Rational Foundation of Moral Reality." In *The Philosophy of P.F. Strawson*, edited by Pranab Kumar Sen and Roop Rekha Verma, 327–45. New Delhi: Indian Council of Philosophical Research.
- Churchland, Patricia Smith. 1986. *Neurophilosophy: Toward a Unified Science of the Mind-Brain*. Cambridge, MA: MIT Press.
- Crane, Tim. 2007. "Cosmic Hermeneutics vs. Emergence: The Challenge of the Explanatory Gap." In *Explaining the Mental: Naturalist and Non-Naturalist*

- Approaches to Mental Acts and Processes*, edited by Carlo Penco and Michael Beaney, 22–34. Newcastle: Cambridge Scholars Publishing.
- D'Oro, Giuseppina. 2007. "The Gap Is Semantic, Not Epistemological." *Ratio* 20 (2): 168–78. <https://doi.org/10.1111/j.1467-9329.2007.00355.x>
- Dennett, Daniel C. 1991. *Consciousness Explained*. New York: Back Bay Books.
- Flanagan, Owen. 1985. "Consciousness, Naturalism, and Nagel." *Journal of Mind and Behavior* 6 (3): 373–90. <https://www.jstor.org/stable/43853176>
- Foss, Jeffrey. 1993. "Subjectivity, Objectivity and Nagel on Consciousness." *Dialogue* 32 (04): 725–36. <https://doi.org/10.1017/S0012217300011367>
- Gorman, Michael. 2006. "Nagasawa vs. Nagel: Omnipotence, Pseudo-Tasks, and a Recent Discussion of Nagel's Doubts About Physicalism." *Inquiry* 48 (5): 436–47. <https://doi.org/10.1080/00201740500241896>
- Lycan, William G. 2003. "Philosophy of Mind." In *The Blackwell Companion to Philosophy*, edited by N. Bunnin and E. P. Tsui-James, 2nd ed., 173–201. London: Blackwell.
- Matthews, Lucas J. 2009. "What Is It like to Be a Dualist? On the Real Challenge of Nagel's 1974 Paper." *Indiana Undergraduate Journal of Cognitive Science* 4: 71–80.
- McGinn, Colin. 1980. "Philosophical Materialism." *Synthese* 44 (2): 173–206.
- McGinn, Colin. 1989. "Can We Solve the Mind–Body Problem?" *Mind* 98 (391): 349–66. <https://doi.org/10.1093/mind/XCVIII.391.349>
- McHenry, Leemon B., and George W. Shields. 2016. "Analytical Critiques of Whitehead's Metaphysics." *Journal of the American Philosophical Association* 2 (3): 483–503. <https://doi.org/10.1017/apa.2016.21>
- Nagasawa, Yujin. 2003. "Thomas vs. Thomas: A New Approach to Nagel's Bat Argument." *Inquiry* 46 (3): 377–94. <https://doi.org/10.1080/00201740310002415>
- Nagel, Thomas. 1965. "Physicalism." *Philosophical Review* 74 (3): 339–56. <https://doi.org/10.2307/2183358>
- Nagel, Thomas. 1970. "Armstrong on the Mind." *Philosophical Review* 79 (3): 394–403. <https://doi.org/10.2307/2183935>
- Nagel, Thomas. 1971. "Physicalism," with "Postscript." In *Materialism and the Mind–Body Problem*, edited by D. Rosenthal. Englewood Cliffs, N.J.: Prentice-Hall.
- Nagel, Thomas. 1974. "What Is It like to Be a Bat?" *Philosophical Review* 83 (4): 435–50. <https://doi.org/10.2307/2183914>
- Nagel, Thomas. 1979. "Subjective and Objective." In *Mortal Questions*, Cambridge, Mass.: Cambridge University Press. 196–213.
- Nagel, Thomas. 1980. "The Limits of Objectivity." In *Tanner Lectures on Human Values*, 77–139. Accessed November 24, 2020. [https://tannerlectures.utah.edu/\\_documents/a-to-z/n/nagel80.pdf](https://tannerlectures.utah.edu/_documents/a-to-z/n/nagel80.pdf)

- Nagel, Thomas. 1986. *The View From NoWhere*. Oxford and New York: Oxford University Press.
- Nagel, Thomas. 1993. "What Is the Mind-Body Problem?" In *Experimental and Theoretical Studies of Consciousness*, edited by G.R. Block and J. Marsh, 1–7; discussion 7–13. Chichester: John Wiley and Sons.
- Nagel, Thomas. 1997. *The Last Word*. New York and London: Oxford University Press.
- Nagel, Thomas. 1998. "Conceiving the Impossible and the Mind-Body Problem." *Philosophy* 73 (285): 337–52. <https://doi.org/10.1017/S0031819198000035>
- Nagel, Thomas. 2002. "The Psychophysical Nexus." In *Concealment and Exposure: And Other Essays*, 194–235. New York, N.Y.: Oxford University Press.
- Nagel, Thomas. 2009. "The I in Me: I and Me." *London Review of Books*, 31 (21). <https://www.lrb.co.uk/the-paper/v31/n21/thomas-nagel/the-i-in-me>
- Nagel, Thomas. 2012. *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*. Oxford and New York: Oxford University Press.
- Nagel, Thomas. 2013, August 18. "The Core of 'Mind and Cosmos.'" *The New York Times*. <https://nyti.ms/2k0ZOyT>
- Nagel, Thomas, Anne Erreich, Richard J. Kessler, Barry Rand, and Jerome Wakefield. 2016. "An Exchange with Thomas Nagel: The Mind-Body Problem and Psychoanalysis." *Journal of the American Psychoanalytic Association* 64 (2): 389–403. <https://doi.org/10.1177/0003065116647053>
- Pernu, Tuomas K. 2017. "The Five Marks of the Mental." *Frontiers in Psychology* 8: 1–19. <https://doi.org/10.3389/fpsyg.2017.01084>
- Ratcliffe, M. 2002. "Husserl and Nagel on Subjectivity and the Limits of Physical Objectivity." *Continental Philosophy Review* 35 (4): 353–77. <https://doi.org/10.1023/A:1023934903646>
- Seager, William. 2014. "Why Physicalism?" *Mind and Matter* 12 (2): 1–28.
- Stoljar, Daniel. 2017. "Physicalism." *The Stanford Encyclopedia of Philosophy*. (Winter 2017 Edition), edited by Edward N. Zalta. Last updated October 18, 2017 <https://plato.stanford.edu/archives/win2017/entries/physicalism/>
- Stubenberg, Leopold. 1998. *Consciousness and Qualia*. Amsterdam: John Benjamins Publishing.
- Sundström, Pär. 2002. "Nagel's Case against Physicalism." *SATS* 3 (2): 91–108. <https://doi.org/10.1515/SATS.2002.91>
- Sundström, Pär. 2018. "How Physicalists Can—and Cannot— Explain the Seeming 'Absurdity' of Physicalism." *Philosophy and Phenomenological Research* 97 (3): 681–703. <https://doi.org/10.1111/phpr.12394>
- Tartaglia, J. 2016. "What Is at Stake in Illusionism?" *Journal of Consciousness Studies* 23 (11–12): 236–55.



- 
- Taylor, Elanor. 2016. "Explanation and the Explanatory Gap." *Acta Analytica* 31 (1): 77–88. <https://doi.org/10.1007/s12136-015-0260-1>
- Thomas, Alan. 2009. *Thomas Nagel*. Buckinghamshire: Acumen.
- Wider, Kathleen. 1990. "Overtones of Solipsism in Thomas Nagel's 'What Is It Like to Be a Bat?' And the View from Nowhere." *Philosophy and Phenomenological Research* 50 (3): 481–99. <https://doi.org/10.2307/2108160>