

# Plausibility and Common Sense: *Mind and Cosmos* by Thomas Nagel

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*Key Words:* Thomas Nagel, Michael Polanyi, Neo-Darwinian worldview, evolutionary naturalism, materialism, mind-body problem, philosophy of mind, teleology, common sense, skepticism.

## Abstract

*Thomas Nagel's Mind and Cosmos, an analytic philosophical excursion into the meaning and implications of the mind-body problem, has striking parallels to Michael Polanyi's thought, especially as it is captured in Personal Knowledge. Indeed, Nagel's courageous and honest challenge to the evolutionary naturalistic orthodoxy that is currently ascendant in elite opinion is perhaps best understood, via Nagel's emphasis on plausibility and common sense, in terms of the faith and commitment that Polanyi places at the center of his thought. But the relationship between the two philosophers moves in both directions: Study of Nagel casts useful light on Polanyi as well.*

Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*. Oxford, New York: Oxford University Press, 2012. Pp. x + 130. ISBN 978-0-19-991975-8. \$24.95.

“And so long as we can form no idea of the way a material system may become a conscious, responsible person, it is an empty pretence to suggest that we have an explanation for the descent of man.”  
*Personal Knowledge*, 390

In his own review of *Mind and Cosmos*, John Haldane, Chairman of the Council of the Royal Institute of Philosophy, states that Thomas Nagel “is rightly regarded as among the most significant philosophers writing today and one of the most acute and consistent authors in contemporary analytical philosophy.” But Haldane’s judgment is far from universal, as demonstrated by *Mind and Cosmos* receiving the 2012 award for “Most Despised Science Book of the Year” from *The Guardian*. What could occasion such radically divergent vehement opinion?

In pursuing this question it will be necessary to identify Nagel’s intentions in writing this short yet important text. As we will see, there are numerous parallels between Nagel’s project and that of Michael Polanyi in *Personal Knowledge*. Among the rewards of reading *Mind and Cosmos* is a better understanding of the reception extended to Polanyi’s work by contemporary mainstream intellectual culture.

Readers of this journal will find much in *Mind and Cosmos* that is familiar. Consider for example the following passages:

1. The hope is not to discover a foundation that makes our knowledge unassailably secure but to find a way of understanding ourselves that is not radically self-undermining, and that does not require us to deny the obvious. The aim [is] to offer a plausible picture of how we fit into the world (25; cf. 110).

2. The essential character of [the hoped for] understanding would be to explain the appearance of life, consciousness, reason, and knowledge neither as accidental side effects of the physical laws of nature nor as the result of intervention in nature from without but as an unsurprising if not inevitable consequence of the order that governs the natural world from within (32-33).
3. Each of our lives is a part of the lengthy process of the universe gradually waking up and becoming aware of itself (85).
4. Natural teleology would require...that the nonteleological and timeless laws of physics...are not fully deterministic. Given the physical state of the universe at any given moment, the laws of physics would have to leave open a range of alternative successor states... (92; cf. 66-67).
5. This is a revision of the Darwinian picture rather than an outright denial of it. A teleological hypothesis will acknowledge that the details of that historical development are explained largely through natural selection among the available possibilities on the basis of reproductive fitness in changing environments. But even though natural selection partly determines the details of the forms of life and consciousness that exist, and the relations among them, the existence of the genetic material and the possible forms it makes available for selection have to be explained in some other way. The teleological hypothesis is that these things may be determined not merely by value-free chemistry and physics but also by something else, namely a cosmic predisposition to the formation of life, consciousness, and the value that is inseparable from them (123).
6. The best we can do is to develop the rival alternative conceptions in each important domain as fully and carefully as possible, depending on our antecedent sympathies, and see how they measure up. This is a more credible form of progress than decisive proof or refutation (127; cf. 126).

Each of these six excerpts from *Mind and Cosmos* contains a theme that represents a bridge to Polanyi:

1. The fallibility of our conclusions (coupled with criticism of performative contradiction and respect for common sense);
2. Articulation of a third alternative to a) purposeless materialism and b) divine intervention;
3. A teleological unfolding of the universe, issuing in consciousness of that very process (cf. *PK*, 405: “the awakening of the world”);
4. Acknowledgement of authoritative impersonal laws of nature married to recognition that these laws may be enlisted in the service of other, superior forces (cf. Polanyi’s “boundary conditions”);
5. Retention of Darwinian evolution in a form subservient to operation of underlying teleological forces residing in the fundamental nature of the universe (cf. Polanyi’s “ordering principle” and its decisive role in evolution and the appearance of life in particular [*PK*, 384]); and

6. Humility regarding the capacity of reason to command assent (following from recognition of the significance of existing commitments as well as the rearing and initiation that gave rise to them). (cf. *PK*, 315).

Given such strong *prima facie* evidence of fundamental agreement between Nagel and Polanyi, it becomes particularly interesting to wonder just how deeply the similarity extends. Can we say that they share foundations in common? Or might it be the case that at a critical point they diverge and that Nagel might have something important to learn from Polanyi? Indeed, might the cogency of his position depend on the insights Polanyi has to offer?

The subtitle of *Mind and Cosmos* is *Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*. The primary strategy by which Nagel intends to establish the conclusion announced by this subtitle is to establish through appeal to common sense that consciousness, cognition, and value do in fact exist and then to point out that if the “materialist neo-Darwinian conception of nature” were true, it would follow that these things are not real. We are asked to conclude, therefore, that the materialist neo-Darwinian conception of nature is erroneous. More fundamentally, Nagel aims to spell out the larger implications of the “mind-body problem.” For centuries philosophers have been troubled by the connection between mind and body. In what conceivable way can the eminently physical body interact with the very different subjective world of mind? One response to the problem is to deny that there is anything to “mind” that is not understandable in terms of the body. On this view, all the seemingly significant mental states are, under appropriate analysis, seen to be reducible to physical categories—which is to say to physiology, if not in the end to chemistry and physics. Nagel cannot abide this conclusion. And, in suggesting why it is false, he believes that he has uncovered facts about the universe that are just as important as what he has established about the mind (42 and, especially, 57).

There is, in addition to common sense, a second reason why Nagel cannot accept reductive materialism. A consistent and thoroughgoing materialism is guilty of performative contradiction. In short, what materialism says regarding the nature of mind is incompatible with the intention to make the case that the mind is in fact that way. (Readers will be reminded of Polanyi’s treatment of the neurological model of mind on pages 262-263 of *Personal Knowledge*.) After all, it requires a mind capable of logical inference and recognition of proper and authoritative implication in order to offer and make a case. But there is no room for these phenomena in the materialist account. Nagel makes no mention of performative contradiction but instead cites Alvin Plantinga and his concept of “warrant” (27). Referring to the evolutionary analysis that has been eagerly seized upon by materialists in order to overcome traditional mind-oriented objections to their account of mental life, Nagel states:

Mechanisms of belief formation that have selective advantage in the everyday struggle for existence do not warrant our confidence in the construction of theoretical accounts of the world as a whole...The evolutionary story leaves the authority of reason in a much weaker position...Evolutionary naturalism implies that we shouldn’t take any of our convictions seriously, including the scientific world picture on which evolutionary naturalism itself depends (27-28; cf. 81 and 125).

Nagel’s argument (as well as that offered by Polanyi and Plantinga, respectively) is a variant of “the argument from reason” employed by C.S. Lewis to defeat naturalism in Chapter 3 of *Miracles*. Given the materialist and neo-Darwinian orthodoxy that reigns in the contemporary university and among elite opinion generally, it will come as no surprise that Nagel faces excommunication for consorting with Christians.

It is further evidence of Nagel's analytic caution that he admits that his argument does not so much show that reductive materialism in its evolutionary naturalistic form is wrong as it demonstrates that such an account is incompatible with our "ordinary judgments" regarding ourselves and the world (29). What *would* convert this argument into a refutation of reductive materialism is the authority of those ordinary judgments—the authority, that is, of common sense. Early on, he states, "I would like to defend the untutored reaction of incredulity to the reductionist neo-Darwinian account of the origin and evolution of life" (6). But, as various critical assessments of *Mind and Cosmos* illustrate, what Nagel regards as his most secure foundation is widely viewed as his Achilles' heel. He is vulnerable to the incontestable observation that the history of science is repeatedly marked by the overthrow of common sense. (The sun, despite appearances, does not orbit the Earth.) The success of science, which itself is undeniable, is in fact attributable to the willingness to call ordinary judgment into question. Nagel's critics portray him as a defender of ignorance and superstition—as an apostate from critical reason. In contending with this critique we have the first of the crucial junctures at which Polanyi has something significant to offer Nagel.

Nagel's "common sense" is closely tied to *belief* which, in turn, is grounded in a conception of plausibility. Early in *Mind and Cosmos*, as Nagel sets the stage for subsequent discussion, he states,

I do not find theism any more credible than materialism as a comprehensive world view. My interest is in the territory between them. I *believe* that these two radically opposed conceptions of ultimate intelligibility cannot exhaust the possibilities (22, emphasis added).

"Belief" is ambiguous. It may refer to the product of reflection or it may refer to a starting point. In this passage we see the latter. Nagel, in a tone reminiscent of Polanyi during several confessional statements in *Personal Knowledge*, declares here what he will not seriously doubt: these two choices *cannot* be all there is. This is where he will dig in his heels. The argument will proceed on this basis. Why? Because it would be implausible to do otherwise. To his credit, Nagel's text is replete with admissions of his personal starting point (in all cases, the emphasis is added):

- His project is constrained by "an *assumption* that certain things are so remarkable that they have to be explained as non-accidental if we are to pretend to a real understanding of the world" (7).
- "Mind...must be included as the most recent stage of this long cosmological history, and its appearance, *I believe*, casts its shadow back over the entire process and the constituents and principles on which the process depends" (8).
- "*I confess to an ungrounded assumption of my own*, in not finding it possible to regard the design alternative as a real option" (12).
- "My guiding *conviction* is that mind is not just an afterthought or an accident or an add-on, but a basic aspect of nature" (16).
- "*I am not disposed to see* the success of science in this way. *It seems to me* that one cannot really understand the scientific world view unless one assumes that the intelligibility of the world...is itself part of the deepest explanation of why things are as they are" (17).
- "*I find it puzzling* that [the orthodox naturalistic] view of things should be taken as more or less self-evident, as I believe it commonly is" (20).
- "That is really my question. *The implausibility* of the reductive program that is needed to defend the completeness of this kind of naturalism provides a reason for trying to think of alternatives..." (20).
- "The inadequacies of the naturalistic and reductionist world picture *seem to me* to be real" (22).
- "There *must be* a very different way in which things as they are make sense..." (53).

Finally, at the close of Chapter 2, Nagel's thoroughly introspective assessment of his enterprise, he expresses the "hope" that a viable alternative to evolutionary naturalism will as a result emerge. Such hope sustains the iconoclastic venture which has made him the target of widespread disdain.

In the first of the above passages the emphasis on "assumption" brings to our attention the personal dimension of Nagel's endeavor. But the term "remarkable" is even more revealing, as is Nagel's reference on the same page to the "astonishing" nature of the world. Nagel is compelled to write his critique of the materialist neo-Darwinian conception of man and the world because in his mind this account plainly cannot account for what he finds astonishing. This raises the question of how it is that Nagel (or anyone else) is capable of astonishment. In considering this matter we are, to begin with, taken back to the episode of the white pebbles at the Welsh train station in Chapter 3 of *Personal Knowledge*. The reader will recall that these pebbles spelled out "Welcome to Wales by British Railways." In the face of this spectacle, Polanyi says, we judge that the organization of the pebbles is intentional. After all, the odds of the many pebbles coming together on their own to spell these words is infinitesimal in comparison to their innumerable alternative possible arrangements. He then asks us to imagine returning to the station at some later time, finding the pebbles lying hither and yon. He observes that we would now be apt to judge that their location was a matter of chance. Polanyi states that this second judgment is peculiar because the odds of the pebbles residing in the new configuration are no less than their coming together to spell out the words. *Any* single configuration of the pebbles is infinitesimally unlikely. So, why were we so impressed when we read the earlier message from the railway, but not now? Polanyi's answer is that we were impressed because we tacitly attributed orderliness to the stones when we encountered the message. It was only in the context of such (attribution of) order that we found the configuration striking. Polanyi adds a second illustration of the point by noting that we are considerably more impressed with being the 500,000<sup>th</sup> visitor to an exhibition than we are by being the 573,522<sup>nd</sup> visitor, even though the latter is the less likely. It turns out that what is responsible for our reaction is the perception of order (an English sentence spelled out in pebbles and the round number, 500,000) coupled to the realization of the myriad alternatives. Polanyi then adds—and this is his central point—that recognition of order is necessary not only to being impressed by what we perceive, but also in order to make the claim that the phenomenon is accidental. Therefore, one cannot properly say that the distribution of the white pebbles on the return visit to the station was either accidental or non-accidental. This is because there was no order about which such a question could be raised.

Let us now bring this discussion to bear on Nagel. Both the evolutionary naturalist and Nagel recognize order—in the existence of species, in the operation of mind, in the intelligibility of the world, and so on. In the face of these things the evolutionary naturalist speaks of chance outcomes in accordance with impersonal laws while Nagel, in contrast, is astonished. In Polanyi's terms, the evolutionary naturalist recognizes order and then denies its "reality," whereas Nagel recognizes order and then points to (or at least hopes for) an "ordering principle." Nagel conducts his search because he cannot and will not be satisfied short of identifying an underlying meaningful dynamic. Why is that?

Polanyi's answer for Nagel is the same as he gives for himself. Each of the philosophers is the person he finds himself to be. Like Polanyi, Nagel recognizes the contingency of his beliefs, ideals, standards, and intellectual expectations (24-25). He believes that "[t]he best we can do" is to develop and present conceptions "depending on our antecedent sympathies" (127). We see such sympathies operating when Nagel refers to "the kind of comprehensive self-understanding we are after" (29) and speaks of his "ungrounded intellectual preference" for a "systematic account of nature, one that makes" such things as mind, reason, and the intelligibility of the world "neither brute facts that are beyond explanation nor the products of divine intervention" (26). In essence, then, Nagel joins Polanyi both in choosing to believe that there *is* meaningful explanation for these phenomena—one that tells us why as well as how they

come to be—and in being resolved to pursue it (113). In principle, no one need hold this belief. But Nagel and Polanyi do, recognize this fact, and self-consciously embrace it. That is the sort of people they are and they invite us to join them. Nagel therefore yearns for a satisfying explanation of what is apparent to common sense. A mere causal account will not suffice (47; cf. 50-58). In response to this yearning he commits himself to the two-pronged task of suggesting how such an account would appear while demonstrating that evolutionary naturalism is incapable of providing it.

Polanyi's first contribution to Nagel, then, is a deeper understanding of the ideals and standards which underlie his expectations and aspirations. Nagel's project, positive as well as negative, proceeds from a respect for common sense combined with a vision of intellectual satisfaction. Granted, these have an indelible personal character. But so, too, do the competing standards and measures of satisfaction that are operating in the minds of his adversaries. Polanyi brings out into the open the true dimensions of the conflict. Just as Nagel is someone who is "strongly adverse to the idea" of God (12), his materialist and evolutionary naturalistic foes are wedded to a conception of the universe without intrinsic meaning and are offended by the very thought of the alternative. In suggesting the existence of a teleological order, Nagel is simultaneously expressing a commitment and electing to do battle. What else can an honest man of courage do?

Do we have, then, simply a war between competing commitments? Is there no truth of the matter? Well, it is certainly the case that *Mind and Cosmos* constitutes a skirmish in a larger battle between conflicting commitments in alliance with their associated ideals, standards, and expectations. But this is not *all* that it is. In grasping this fact Polanyi makes yet another vital contribution to our understanding of Nagel's book. Polanyi observes that through our intellectual commitments we aim to arrive at reality, i.e., at that which is true. But some commitments are superior to others. In a conflict between commitments, the superior candidate is the one which, when embraced and acted upon, leads to the truer outcome. One's claims, and hence the vision that inspires them, will be adjudicated by subsequent explorers within a tradition of inquiry. Nagel and his adversaries are locked in combat, vying for the allegiance of those who study their arguments and whose collective views, at a later time, will constitute authoritative opinion. It is clear from *Mind and Cosmos* that Nagel has at least an intuitive grasp of this process. But in *Personal Knowledge* Polanyi articulates it explicitly in rich detail.

This deep similarity between Nagel and Polanyi is illustrated in their respective responses to skepticism. *Personal Knowledge* is for Polanyi an attempt "to stabilize knowledge against scepticism" (*PK*, 245). On his view the political horrors of the twentieth history were largely the consequence of an extreme yet hypocritical skepticism that grew out of Cartesian systematic doubt. Polanyi's chief foe is a proud and habitual skeptical frame of mind; the central purpose of his philosophical career is to overcome its influence and decisively defeat the underlying impulse (see, for example, *PK*, 381). Interestingly, Nagel, due to his energetic suspicion of reductive materialism and evolutionary naturalism, is often characterized by his critics as a skeptic. This is fair since he refers to himself as such (7, 11). But "skepticism" too is an ambiguous term. On the one hand it can refer to a general and systematic stance toward any and all claims to know. (This is the target of Polanyi's critique and is challenged, with something less than Polanyi's confidence, by Nagel as well [24].) But, on the other hand, skepticism may refer to doubt in regard to a particular claim or set of claims. It is only in this second sense that Nagel can responsibly be classed under the heading of "skeptic." Indeed, as noted above, *Mind and Cosmos* is to a striking degree characterized by statements of faith and commitment. At the heart of the book is belief in common sense and an affirmation of the plausibility of our belief in the reality of mind. Whatever skepticism Nagel exhibits is the product of such belief (7). His fundamental attitude is the furthest thing from skepticism in the global sense and, in his stance of commitment and affirmation, Nagel finds himself in deep alliance with Polanyi. We can justly regard *Mind and Cosmos* as an application to philosophy of mind and the mind-body problem of the central themes of *Personal Knowledge*.

Perhaps the most important matter raised by *Mind and Cosmos* for students of Polanyi is this: Where does Polanyi (and where do they) stand in regard to the several competing world views whose treatment constitutes the heart of the book? At first glance it appears that Nagel is concerned with three positions: materialism, theism, and his own third alternative—one that is “secular” and “naturalistic” yet “transcendent,” “immanent,” and teleological (22, 32, 29, 95). But there is a fourth possibility. We could choose “to give up the project of external self-understanding altogether and instead to limit ourselves to the sufficiently formidable task of understanding our point of view toward the world from within” (29-30). In Nagel’s view this fourth option is as radical as any of the others. However, because “[t]he question is there, whether we answer it or not,” the fourth possibility is unsatisfying and he rejects it out of hand (30). We are left, then, with the other three.

Nagel confesses to being atheistic by temperament (12). Because of his kinship to Polanyi regarding the important role played by belief and commitment, Nagel acknowledges the significance of such a starting point. But his opposition to the theistic position (or the “intentional alternative,” 94) is also predicated on an argument. Nagel starts from the premise that only a “unified” explanation will do (12, 33). By this measure theism is deficient. He states,

Theism pushes the quest for intelligibility outside the world. If God exists, he is not part of the natural order but a free agent not governed by natural laws. He may act partly by creating a natural order, but whatever he does directly cannot be part of that order. (26)

He then adds that under theism “[t]he kind of intelligibility that would still be missing is intelligibility of the natural order itself—intelligibility from within...Such interventionist hypotheses amount to a denial that there is a comprehensive natural order” (26). Earlier, he noted, “So long as the divine mind just has to be accepted as a stopping point in the pursuit of understanding, it leaves the process incomplete, just as the purely descriptive materialist account does” (21). It is for this reason that Nagel concludes that “both theism and naturalistic reductionism fall short. Theism does not offer a sufficiently substantial explanation of our capacities, and naturalism [due to performative contradiction as well as implausibility] does not offer a sufficiently reassuring one” (25).

Nagel’s preferred worldview—the teleological—declares that purpose is immanent in the constituents of nature themselves. This view is simpler than theism insofar as nothing external to nature is required to account for those things—mind, consciousness, cognition, and value—whose autonomy materialism and evolutionary naturalism will not allow. For this reason, the teleological position is “unified.” Readers familiar with Polanyi will understand why simplicity, parsimony, and unity count so heavily in determining plausibility: they are constituents of beauty, and the truth is known by, among other things, its elegance. Nagel, while not denying a role for “aesthetic preference,” says that the more important factor in adopting an explanation is that it “gives greater understanding” (17; cf. 114). Polanyi would observe that what Nagel takes to be a distinction is instead largely a synonym. The constituents of “greater understanding” are intrinsically aesthetic in nature.

Polanyi rejects materialism and reductionism in any guise, and he embraces teleology under the headings of the “success” of life (*PK*, 381-382), the “aim” of man and his world (*PK*, 405), and, in the end, “emergence” (*PK*, 382ff.). But is there in *Personal Knowledge*, despite its respectful citations of Christianity and its occasional yet passionate references to God, any more provision for divine intervention (i.e., for the “intentional alternative”) than there is in *Mind and Cosmos*? While recognizing that such a conclusion will be controversial, this reviewer believes the answer to be “No.” On page 265 of *Personal Knowledge* Polanyi declares, “If man died, his undeciphered script would convey nothing.

Seen in the round, man stands at the beginning and at the end, as begetter and child of his own thought. Is he speaking to himself in a language he *alone* can understand?" (Emphasis added.) The answer to this haunting question appears somewhat later:

God cannot be observed, any more than truth or beauty can be observed. He exists in the sense that He is to be worshipped and obeyed, but not otherwise; not as a fact—any more than truth, beauty or justice exist as facts. All these, like God, are things which can be apprehended only in serving them. (279; cf. 393, 395, and 398)

As noted by Louis P. Jones in his review of *Mind and Cosmos*, Nagel offers "a self-purposed universe blossoming in empty time-space," one "whose final goal, Mind, is an end that always abided in its beginning." In this respect at least, the roles are reversed and it is Nagel who helps us understand Polanyi.

Although *Mind and Cosmos* is brief, it treats some of the most important issues of our time (or any time). In examining the book there is always more to say. But every review must end and so, too, will this one, leaving untouched a number of additional consequential matters, not the least of which is *emergence*, a theme central to both Nagel and Polanyi. Such further study, stimulated by Nagel's courageous and honest labor, is the work of another day.