Thomas Nagel. Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False. Oxford: Oxford University Press, 2012.

Since 1980, Thomas Nagel has served as University Professor in the Department of Philosophy and the School of Law at New York University. Over the last five decades he has acquired a reputation as perhaps the foremost participant in discussions relating to two quite distinct fields: moral and political philosophy on the one hand, and the philosophy of mind on the other.

The point of departure for Nagel's way of proceeding is the thought that for the agenda shared by advocates of strict reductionism to prosper, a successful demonstration must be given of exactly how consciousness, cognition and value can be incorporated into a materialist conception of the world. After all, at least at first glance, these phenomena do not seem to possess any recognizably material character. The standard materialist answer to the question of how something possessing such a character could come to have the form that these phenomena or properties do is, of course, evolution. In other words, if evolution is incapable of providing an explanation for consciousness, cognition and value, then its credibility will be irreparably damaged.

The book under review here consists of an Introduction (as a first chapter), four chapters and a Conclusion. In the second chapter, entitled "Antireductionism and the Natural Order," Nagel sets out to analyze the implausibility of the reductivist program needed for a defense of the completeness of a certain kind of naturalism—a program which he takes to

revolve around the following two claims: (i) that biology is, in principle, exhaustively explainable in terms of physics and chemistry, and (ii) that evolutionary psychology provides an adequate, if approximate, basis for conceiving of all things pertaining to human life as no more than a highly complex result brought about by the motions of physical particles occurring in conformity with specifiable laws.

The third chapter, "Consciousness," leads to a broadly conceived elaboration of the thesis that physical science cannot enable us to understand those salient features of consciousness that, in being irreducibly subjective, correspond to a strikingly different part of our world. On the one hand, according to Nagel, "the materialist version of evolutionary theory cannot be the whole truth. Organisms such as ourselves do not just happen to be conscious; therefore no explanation even of the physical character of those organisms can be adequate which is not also an explanation of their mental character" (45). Consciousness, of course, is an area of philosophical terrain with which Nagel may be said to be exceptionally well acquainted. His exemplary essay "What is it like to be a bat?" turned out to be one of the driving forces behind the instigation of the now booming field of consciousness studies. (See, for example, Chalmers' book *The Conscious Mind*, <sup>1</sup> which offers a similar view of materialism). On the other hand, Nagel counsels against giving up on the aim of finding a new, integrated, naturalistic explanation of consciousness. He explores the possibility of giving a reductive account of consciousness based on some form of universal monism or panpsychism (86).

The fourth chapter is entitled "Cognition," and foregrounds the most striking features of Nagel's rationalism. He suggests that reason affords us insights into the realm of empirical facts that evolution cannot capture ("reason connects us with the truth directly," 82). Whereas perception has emerged as conducive to our evolutionary interests in virtue of providing us with a conception of reality mediated by the mental entities it causes us to have, reason gives us immediate insight into the world. If I understand that my beliefs are in contradiction, I know directly that one of them is false (83).

In the fifth chapter, "Value," Nagel asserts that the problem of the place of value in the natural world includes, but goes beyond, the problem of the place in it of consciousness and of cognition. To explain this claim is, according to Nagel, to explain what is meant by "the reality of value"

<sup>1.</sup> David John Chalmers, *The Conscious Mind: In Search of a Fundamental Theory* (New York: Oxford University Press, 1996).

(as subjectivism and realism about value both purport to do). In Nagel's conception our direct access to value comes from our human life. It is the life of a highly specific type of organism, occurring as it does in the specific culture it has itself created. As we can see, this is tantamount to questioning whether our consciousness can, after all, be explained simply in terms of our animal equipment. In casting doubt on this, he has in mind the thought that it may be highly unrealistic to expect that life could be explained as something emerging from physical and chemical goings-on, and is prepared to entertain doubts as to whether a process of random genetic mutation accompanied by natural selection could ever explain the richness and complexity of life and of value. Nagel proposes an alternative, which would involve treating mind, consciousness and value as being just as fundamental to an account of what there is as matter and space-time are typically taken to be. His answer includes a "natural theology," according to which the world has developed as it has because it has itself strained towards a higher state. "According to the hypothesis of natural teleology, the natural world would have a propensity to give rise to beings of the kind that have a good—beings for which things can be good or bad" (121).

Nagel's teleological view is by no means restricted to value, as in other chapters of his book he also adopts a teleological approach in relation to subjective consciousness and cognition. On the one hand he acknowledges firstly that such beings as sources of value have appeared throughout the course of the natural process of evolution, secondly that they have actual and possible forms of life, and thirdly that they have appeared throughout the historical process of evolution. Nevertheless, he holds that "part of the explanation of that process and of the possibilities on which natural selection operates would be that they bring value into the world, in a great variety of forms" (121). On the other hand, he is no creationist, at least in the traditional sense of this term. Indeed, he writes that "Whatever one may think about the possibility of a designer, the prevailing doctrine—that the appearance of life from dead matter and its evolution through accidental mutation and natural selection to its present forms has involved nothing but the operation of physical law-cannot be regarded as unassailable. It is an assumption governing the scientific project rather than a well-confirmed scientific hypothesis" (11). Yet he is not putting forward an intentional explanation here: it is not the case that a divine builder has occupied himself or herself with the world in order to foster the emergence of consciousness or value. Rather, the world, all by itself, plans for and designates as its goal this emergence. Nagel assumes a kind of immanent providence on the part of the world itself, attracting natural processes,

bringing them together and making sure that value then issues out of this. He is very modest about the details of his vision of the emergence of consciousness and values, but what he is sure about is that we need such a vision for the world to be completely intelligible, and this—the intelligiblity of the world—is one of the most important assumptions of his book.

Finally, three remarks are in order: about (a) reduction, (b) evolution and (c) the book itself. As regards (a), reductionism can be conceptualized as a metaphysical thesis, distinguished by its resting at bottom on an argument to the effect that if there is only material (i.e. near-indeterminate) stuff in the world, then the properties of such stuff must finally explain everything in that world. This is a contested thesis, much discussed by philosophers. But what the last 40 to 50 years of work in the philosophy of science has established is that this kind of reductionism (see, for example, the type-type reductionism proposed by J. Smart or U. T. Place) has only marginal importance for science. Even if it were indeed to be proved that most scientists make assumptions like this, that would be merely a psychological curiosity and not a deep insight into science itself. A more carefully thought out materialism goes no further than is permitted by a rejection of the idea of near-indeterminate stuff. Such a materialism will be quite unaffected by Nagel's critique. Indeed, we may wonder about Nagel's reasons for thinking that materialism must have such a reductive nature. This is because he is profoundly convinced that "everything about the world can at some level be understood. . . . The view that rational intelligibility is at the root of the natural order makes me, in a broad sense, an idealist—not a subjective idealist . . . —but an objective idealist in the tradition of Plato and perhaps also of certain post-Kantians. . . . " (17). We could say that for Nagel, if science is incapable of creating a theory of everything, then it has, in some serious sense, failed. In this way Nagel may be said to be bound de facto to reductionism: the breakdown of reductionism is therefore the breakdown of science, while Nagel's own aspiration is that of revitalizing rationalism for an atheistic era. As regards (b), Nagel assumes that life and consciousness share a long evolutionary history, and that natural selection has contributed to it. Nagel's atheistic view is that neo-Darwinism (as it is understood today) needs to be complemented by something else: that is to say, the laws of nature, as conceived by materialists, must be completed by the addition of something more, if we are ever to include our consciousness and values into our scientific picture of the world. With respect to (c), it should be said that while Nagel's book is short, it is by no means a light or quick read, as it makes ambitious demands and is written at least partially in technical language. Nagel persistently endorses the thesis that

## BOOK REVIEWS

the so-called "hard problem of consciousness" (subjectivity, qualia), rather than being just relevant to some region or subdomain of reality, is one that challenges our understanding of the cosmos and its evolution as a whole. He expects any new science of the future that is prepared to struggle in earnest with the problems of consciousness, cognition and value to be one that has gone through a process of fundamental self-reassessment.

Viewed in the most general terms, Nagel is engaged in the traditional philosophical quest to determine the boundaries of scientific cognition. My own view is that his proposal, taken as a whole, constitutes a line of thinking about this that deserves to be taken seriously. However, independently of whether we are sympathetic to that line or not, reading this book will certainly prove a worthwhile venture, as it is certain to have an inspiring effect on the reader's own attitude towards mind and the cosmos.

Jozef Bremer

Marcus Plested. *Orthodox Readings of Aquinas*. Oxford: Oxford University Press, 2012.

Having once had the opportunity of listening to an interesting paper by a young scholar, Marcus Plested, on Georges Florovsky's approach to Thomas Aquinas, which he gave at the International Colloquium at Saint-Serge, I was intrigued and therefore very eager to read the book he has written on the subject of *Orthodox Readings of Aquinas*. I must confess that my expectations were more than satisfied. The author has succeeded in shedding light on Aquinas from a perspective that is remarkably new, not only for those coming from a background in Eastern Christian thought, but also for those specializing in the Western tradition. As someone who sees herself as having been raised in and formed by Thomas' legacy, I shall discuss Marcus Plested's book as seen through the eyes of a committed Thomist.

Plested convincingly shows that numerous studies devoted to the original thought of Thomas Aquinas notwithstanding, there is an area of which

1. Marcus Plested, "Georges Florovsky and the West: Thomas and Thomism" (paper presented at the Colloque international à l'occasion du 30<sup>e</sup> anniversaire de la mort du P. Georges Florovsky (1893–1979), Institut Saint-Serge, Paris, November 27–28, 2009).