Despite the fact that the title of this book reflects well its contents, and the method is relatively straightforward—a systematic contrast between the doctrines of Neoplatonists and Descartes on the topics there named—having finished it, I am still unsure of its ultimate aim. The conclusion (255-60) summarises the argument precisely, but it remains unclear to the end whether Nikulin’s intention is simply historical (probably) or critical (perhaps).

One could conclude from reading this book that, the immense practical value of modern science notwithstanding, to the extent that the latter depends conceptually, or perhaps even merely historically, on Descartes’ innovations in metaphysics, the mathematical sciences systematically obscure from our intellectual view profound truths about the nature of the world and ourselves, truths that it would be of greater benefit for us to know than anything these sciences can provide. But Nikulin does not say so. He does not even suggest that as a ‘theory’ proposed to account for the world and ourselves Neoplatonism deserves more respectful and thoughtful treatment by philosophers than it has been accorded for the last three and a half centuries. Yet he clearly thinks this, at least.

Nikulin has previously published books in Russian and German on related topics (1993, 1996), and the range of his scholarship is impressive. His strengths as an interpreter of philosophical texts and positions are demonstrated here in the very detailed analyses of both Plotinus and Proclus (on the one hand), and Descartes (on the other), philosophers straddling both sides of a practically unbridgeable discontinuity between two radically different conceptions of philosophy itself (cf. x). He synthesizes their overall positions, charting occasional disagreements (among the Neoplatonists) and vacillations (in the case of Descartes), across each of the topics involved in his location of the crucial break between antiquity and modernity. Here, at least is something definite, although not entirely original. In a general sense Heidegger is in the background, but more specifically David
Lachterman, who, in *The Ethics of Geometry* (New York, 1989, cited incidentally here at 122 n.253), traced back to Descartes, as the distinguishing mark of modernity, the conception of objects of knowledge as the products of subjective construction.

Nikulin contrasts Neoplatonists and Descartes on the topics of matter, substance, infinity, arithmetical and geometrical objects and their ontological status, intellect (or mind), imagination, and movement within geometrical imagination and within the intellect. Descartes lacks the conception of intelligible matter, as employed by Proclus, for instance, to locate geometrical objects as ‘intermediates’ between Forms and physical phenomena. Nikulin shows that because of this, and his identification of physical matter with extension, Descartes has no choice but to assimilate geometrical to physical objects as the objects of physical science (*mathesis universalis*) (208, cf. 104). Given his parallel mathematical assimilation of geometry to algebra (his co-ordinate geometry) he opens the door for the conception of the objects of experience and knowledge as constructions. All that stands in the way of subsequent subjectivism is his conception of God as the guarantor of independent truth, grounded in his adoption of the idea of an actual infinity (one respect in which Descartes does not differ from the Neoplatonists, unlike Aristotle). As infinite, and so beyond our cognitive grasp, God himself grasps the truth of all things he creates independently of our thought. See 210-17 on the historical breakdown of this metaphysical guarantee, and 220-1 on its origins in Descartes’ own privileging of imagination (here I think Lachterman is more useful).

As Nikulin suggests, Descartes has fudged two central problems here: physical objects are not exact, like the geometrical ones that supersede them in his mathematical physics, so that this science is not actually a (direct) knowledge of the objects we encounter in nature. Secondly, the assimilation of geometrical objects to arithmetic ones, necessary to co-ordinate geometry, and so *mathesis universalis*, contradicts the radical distinction between extended substance (matter) and thinking substance (mind) basic to Descartes’ ontology. As ideas, numbers are (in Descartes’ ontology) modifications of the mind (126-7, 209).
The discussion of Neoplatonist positions is generally clear and coherent, and not controversial, although I did find the account of the constitution of number in Plotinus (83), and the report of the reductio ad absurdum demonstration of the plurality of units from Ennead VI.6.11.10-24 (84) no clearer than Plotinus’ own difficult text. What might bother some readers is the extent to which Nikulin assimilates Plato himself to these views (e.g. 129, 207)—a persisting traditional feature of the Russian interpretation of Plato, I believe, although Nikulin also appeals to the Tübingen school (e.g. 88 n.102, 127 n.281). Possibly he is right to think of ideal numbers as essentially ordinal (87), as I have myself argued they are for Plato (International Journal of Philosophical Studies 8, 2000, 23-46), but it seems wrong to attribute to the latter the sophisticated baroque conception whereby Plotinus reconciles this with the Academic theory, as reported by Aristotle, of form-numbers as groups of units: after all Aristotle may have got Plato wrong (as I have argued, loc. cit.).

Again, where Nikulin objects to Ian Mueller’s account of construction in Euclid as a method for demonstrating the existence of entities (224), on the grounds (among others) that Mueller ignores the status of geometricals as intermediates, he confuses Euclid’s ontological indeterminateness (i.e. his purely mathematical concern) with late Platonist interpretation. (For a carefully argued case that Euclid nevertheless does respond to philosophical concerns see Lachterman, ch.2.). On the other hand, Nikulin’s articulation of Plotinus’ conception of the unity of Being, the Forms and Intellect (149-51) is lucid and persuasive.

This volume from Ashgate is printed in a rather small font. It is usefully divided into short focused sections with subheadings, but there is little concession to aesthetics in the layout, and the ongoing march of pages presents the reader with a rather forbidding appearance. An additional visual oddity in quotation of Greek is the consistent transliteration of upsilon as ‘y’ even in diphthongs.

More importantly, there is a lot of repetition in the presentation, owing to the comparative method, while (I suspect) a bolder aim at a more explicit overall critical or historical conclusion might have produced a better organisation of the material. Again, this might have led to a
better explanation of why Neoplatonism, rather than Aristotelianism, is the most useful contrast to be made with Descartes: Nikulin proposes that Plotinus defines ‘ripe antiquity’, being liminal between ancient and medieval periods, and uniting Platonic, Aristotelian and Stoic schools (x, xii-xiii). It is true that the Neoplatonists absorbed what they could of Aristotle, and rejected the rest, but it is, after all, Aristotelianism that Descartes too is consciously rejecting. If Nikulin really thinks that Descartes does not have the resources to reject Neoplatonism, the closest he gets to it is just to say,

as it will be argued, for those ancient scientists and philosophers who follow the Platonic-Pythagorean programme, [the application of mathematics to physics] is not at all evident, and is, in fact, impossible ... (x)

—which is not quite the same thing. Nevertheless, this book contains, distinctly, careful and useful studies of the two forms of philosophy it addresses, and will thus be of significance to philosophers seriously interested in either of these individually, or in a measure of the conceptual difference between the ancient and the modern world.

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