Neoplatonism and the Philosophy of Nature edited by James Wilberding and Christoph Horn

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After a long period of neglect, recent decades have seen an increasing interest in, and revaluation of, Neoplatonic physics or, as James Wilberding and Christoph Horn prefer to call it, philosophy of nature [1]. The articles in this fine volume, many of which were originally presented at a conference hosted by the University of Bonn in 2007, are among a variety of recent high-quality publications on this topic—including the proceedings from an international workshop held in Castelvecchio [Chiaradonna and Trabattoni 2009], the second volume of Sorabji's *The Philosophy of the Commentators* [2005], and Wilberding's works on Plotinus' cosmology [2006] and Porphyry's biology [2011].

These few references, which are only a small part of the relevant studies on this until now under-researched topic, show that the prejudicial view that Neoplatonic philosophers had little to contribute to the investigation of nature and physical reality is starting to fade away. The resurgent interest in Neoplatonic views on nature does not imply that Neoplatonists were natural scientists in the style of Aristotle, Galen, or Ptolemy. However, while their explanations of specific physical phenomena tended to lack detail, the Neoplatonists generally had a coherent and comprehensive account of physical reality, albeit with some significant variations. These Neoplatonic accounts, often rigorous and innovative, are relevant not only for a more accurate understanding of Neoplatonic metaphysics but also for the history of philosophy and science more generally.

The volume collects 10 articles and is thematically divided into two parts. The first, 'The General Metaphysics of Nature', reflects the generally shared

 $^{^{1}}$ See the remark about Plotinus in Wildberg 2009, 122.

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view that the complex metaphysics of the Neoplatonic philosophers provided them with the conceptual framework for their elaborations concerning nature. This part is dedicated to the explanation of the relation between central Neoplatonic metaphysical doctrines and aspects of their account of the natural world. The second part, 'Platonic Approaches to Individual Sciences', delves into the application of these doctrines to individual disciplines, in particular, to the theory of elements, geometry, biology, and geography. However, this division is rather thin, for, as will appear more clearly in the summary below, some of the articles could have been justifiably placed in either part.

In the first article, 'Plotinus on Logos', Lloyd P. Gerson argues that we should understand Plotinus' claim that a lower principle is the $\lambda \acute{o} \gamma oc$ of a higher principle—for example, that Nature is the $\lambda \acute{o} \gamma oc$ of Soul—by considering in what sense x (the higher principle) is virtually y (the lower principle). Gerson argues that virtuality should not be understood as potentiality or potency. The meaning of « $\delta \acute{o} \nu \alpha \mu c$ » as virtuality is, indeed, prior to its meaning as passive and active potentiality. Virtuality rather indicates a relation of explication and implication: each lower level is the external activity from the higher level, an actualization of the virtuality of the higher principle [20], and its expression and instrument [24–25].

While this article is certainly interesting and thought provoking in that it tries to solve what may appear as a flaw in Plotinus' theory of δύναμις, there are some shortcomings. Gerson does not discuss the rich array of excellent studies published in recent years that offer alternative accounts of the δύναμις and ἐνέργεια of intelligible beings in Plotinus. His dismissal of the interpretation of the One's δύναμις πάντων as active potency or as active power² is unpersuasive, given that he does not engage with recently published in-depth investigations on the One's active power, and neglects passages such as 5.4.1.23–34 in which Plotinus appears to have productive power, and not just virtuality, in mind.³ While Gerson does address external activity (or second ἐνέργεια) in connection to virtuality, he does not elucidate

Thus, he writes: 'When Plotinus says that the One is δύναμις πάντων, which I render as "virtually all things", he does not mean that the One has an active potency, since the One has not potency whatsoever' [18] and 'Armstrong typically renders δύναμις as "productive power". I fail to see how the word "power" excludes all potency' [18n6].

³ See, for example, Aubry 2000 and 2007, 215–247; but the list is much longer.

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satisfactorily the bond between external activity and internal activity,⁴ which Plotinus identifies with active power.⁵ Finally, his thesis would have been more persuasive if he had included *Enn.* 2.5 (25) in the dossier of Plotinian texts analyzed in the article, as this is the only treatise expressly and entirely dedicated to the investigation of the meaning of «δύναμια» and «ἐνέργεια».

Andrew Smith's article, 'The Significance of "Physics" in Porphyry: The Problem of Body and Matter', contains a helpful presentation of Porphyry's main concerns in his consideration of physics based both on his classification of Plotinus' writings and on the fragments from his lost commentaries on Aristotle's *Physics* and Plato's *Timaeus*. The article focuses in particular on Porphyry's conception of matter. According to Smith, Porphyry's underlying concern is with the danger of dualism entailed both in the consideration of matter as an independent principle and in a temporal conception of the generation of the sensible world and matter.

Stephen Menn's 'Self-Motion and Reflection: Hermias and Proclus on the Harmony of Plato and Aristotle on the Soul' is an interesting and illuminating treatment of the harmonization of Plato and Aristotle within the Neoplatonic tradition. As an example of the concerns and strategy behind the harmony thesis, Menn analyzes Hermias' treatment of the immortality of the soul and of its self-motion. Menn's claim is that, in order to understand Neoplatonic attempts to harmonize Plato and Aristotle correctly, we should consider what the Neoplatonic philosophers viewed as the real tension between them. This tension, contrary to our contemporary understanding of the differences between Plato and Aristotle, turned around the risk of improperly assimilating divine things to lower things [46]. The intent of Neoplatonists such as Hermias and Proclus is to use Aristotle in order to rehabilitate Plato whenever Platonic passages seem to assimilate unduly the divine to the lower. The particular case analyzed by Menn is the passage on the immortality of the soul in *Phaedrus* 245c.

Alain Lernoud's 'Nature in Proclus: From Irrational Immanent Principle to Goddess', is a thorough and careful investigation of Proclus' understanding of Nature and of its causal role in the sensible world. Lernoud approaches this issue from the viewpoint of the problem of the reconciliation between

⁴ Except for a brief remark on the One's primary activity as self-loving [28].

⁵ See, for example, the brilliant discussion of this point in Emilsson 2007.

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immanence and transcendence [70]. According to the author, Proclus, like Aristotle, maintains that Nature is a principle of movement inseparable from bodies. However, contrary to Aristotle, he does not conceive nature as the immanent form but rather as a hypostasis placed between the Soul and the corporeal in the hierarchical, vertical, and dynamic unfolding of creative powers. As such, Nature is situated above bodies and maintains its transcendence in spite of being distributed in bodies [99–100].

Christia Mercer's 'Platonism in Early Modern Natural Philosophy: The Case of Leibniz and Conway' aims to open a path for a more careful consideration of the role played by Platonism in the development of early modern natural philosophy. According to Mercer, Leibniz and Conway turned to Platonism in order to solve the problems raised by mechanical natural philosophy: because mechanism has stripped nature of the substantial forms [116–117], it cannot appeal to these forms to account for the source of activity. Moreover, the rise of mechanism raised difficulties in accounting for unity and cosmic plenitude. For Mercer, both Leibniz and Conway are conciliatory eclectics in that they endorsed the new physics but 'demanded that their natural philosophy be consistent with the goodness, plenitude, and power of the divinity' [125]. While Mercer's article is more of an overview than an in-depth investigation, this is not to say that it is uninteresting or unpersuasive. On the contrary, Mercer acutely identifies the main lines for future research. Unfortunately, despite its merits, the article seems out of place in this volume: it is the only one dedicated to the influence of late-ancient Neoplatonic natural philosophy on later periods and, unlike the other articles, seems to be written with an introductory purpose.

The second part of the volume begins with the late Ian Mueller's 'Aristotelian Objections and Post-Aristotelian Responses to Plato's Elemental Theory', which addresses Simplicius' commentary on Aristotle's objections in *De caelo* 306a1–307b18 against the elemental theory that Plato develops in the *Timaeus*. The main focus of the article is Simplicius' assessment of Proclus' response to Aristotle's objection. Mueller's claim is that Simplicius' disagreement with Proclus is motivated by his belief that Aristotle's objections are meant as a correction against possible misunderstandings of Plato's elemental theory: contrary to Proclus' antagonistic conception of their relationship, Simplicius views Plato and Aristotle to be in fundamental agreement [144].

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The problem of the harmony between Plato and Aristotle resurfaces in the excellent article by Jan Opsomer, 'In Defence of Geometric Atomism: Explaining Elemental Properties'. The first pages give an overview of the geometric atomism articulated by Plato in the *Timaeus* and of Aristotle's objection to it in *De caelo* 3, while the rest reconstructs and analyzes the Platonists' reply to Aristotle's criticisms, focusing especially on Proclus and Simplicius. According to Opsomer's reconstruction, Proclus' and Simplicius' interpretation of Plato's geometric atomism is characterized by their development of the Timaean theory through the derivation of affective qualities, such as warmth and dryness, from geometric properties. Their responses to Aristotle's objections run contrary to an Aristotleianizing interpretation (which Opsomer suggests might be due to Pericles of Lydia).

In an extremely interesting article, 'Plato's Geography: Damascius' Interpretation of the *Phaedo* Myth', Carlos Steel examines Proclus' and Damascius' interpretation of the description of the Earth in *Phaedo* 108c5–113c8, addressing four problems: its position, spherical shape, stability, and size. Both Proclus and Damascius interpreted this section of the *Phaedo* myth as containing a true account of the nature of the Earth. Moreover, they tried to give empirical evidence to substantiate the story told by Socrates, even at the cost of attacking mathematical geographers whose accounts contradicted it. Some of the arguments articulated by Damascius—for example, the one in defense of the sphericity of the Earth in his *Commentary on Plato*'s Phaedo, cp. 1 §515—are based on Aristotle's *De caelo* 2.4 despite being Neoplatonic in inspiration. Indeed, both Proclus and Damascius, while defending Plato against Aristotle's criticisms, nonetheless integrated several elements of Aristotle's cosmology into their interpretation of Plato's account of the nature of the Earth.

Steel's article intervenes in the debate, recently reactivated by David Sedley, on the nature of the *Phaedo* myth [2007]. Sedley contends that, in addition to its moral content, the myth conveys Plato's teleological science and geography. Moreover, Sedley suggests that the 'someone' to whom Socrates attributes this teleological cosmology is actually Plato himself. Steel is more cautious about this matter: he finds the identification of this 'someone' with Plato implausible [177] and concludes that, while he '[admires] the ingenuity of the Neoplatonic interpretation', he does not believe that Plato wanted to express his scientific views on the nature of the Earth in this myth [196]. Although I am rather sympathetic to Steel's view and find his investigation

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into Damascius' *Commentary* extremely helpful, I am unsure that his analysis of Proclus' and Damascius' interpretation of the *Phaedo* myth in any way supports this conclusion.

The last two articles are dedicated to biology. Wilberding's 'Neoplatonists on "Spontaneous Generation" explains the problem of *abiogenesis* (that is, the coming-to-be of living beings from non-living matter) posed for Neoplatonic philosophers and their manner of resolving it. The main concern of Platonists such as Themistius, Philoponus, or Proclus was of a metaphysical nature: *abiogenesis*, or 'spontaneous generation', was incompatible with the Neoplatonic metaphysical principle according to which souls cannot be generated from lower principles. Their solution, with some variations, consisted in arguing on theoretical grounds that all apparent cases of spontaneous generation are actually cases of generation from pre-existing life.

Christoph Horn's 'Aspects of Biology in Plotinus' focuses on the biological aspects of Plotinus' notion of life. The concept of life, indeed, plays a role well beyond the biological sphere, for Plotinus attributes life to Intellect and even to the One, and at times identifies it with ἐνέργεια. However, separating the biological from the metaphysical aspects in order to focus only on the former is a difficult task, for, as Horn correctly remarks, one of Plotinus' main concerns in his investigation of the biological life of sensible compounds is the elaboration of an alternative model to Aristotelian hylomorphism. This model does use some Aristotelian elements—for example, in the theory of double ἐνέργεια—but it adapts them to a theoretical framework fundamentally characterized by vertical causality and psycho-physical dualism.

As I hoped to convey, Wilberding and Horn's volume is a welcome and important contribution to a largely under-researched field, which is finally drawing scholarly attention. It covers a wide range of late ancient Neoplatonists and is more unified, both thematically and stylistically, than typical conference proceedings. The volume is also well edited with a bibliography, index locorum, and subject index. It will certainly be a point of reference for those investigating the fascinating philosophy of nature elaborated by Neoplatonic philosophers.

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