
Martijn’s aim in this volume is to correct various misconceptions regarding Proclus’ philosophy of nature as it is presented in his commentary on the *Timaeus*. She particularly wants to reveal in it, against Lernould, a theme of continuity between the material and intelligible realms, while at the same time demonstrating the shortcomings of Lernould’s efforts to demonstrate that Proclus’ *φυσιολογία* is simply reducible to *θεολογία*. She does this by calling our attention throughout to the multi-layered quality of Proclan *φυσιολογία*. The heart of Proclus’ account of nature in the *Commentary* is his analysis of the prooemium to the dialogue, where he most extensively develops his methodology. Here are contained two indispensable ‘clues’ to his understanding of the cosmology of the *Timaeus*: his ideas that the dialogue is a hymn to the Demiurge and that the prooemium is designed to demonstrate that the philosophy of nature is a science.

Martijn first considers Proclus’ understanding of Plato’s treatment of nature, an undertaking that immediately presents her with two problems. First of all, that there is in Plato no doctrine of nature as such is an issue that bothers modern commentators much more than it did ancient ones. Then there is the more general question of the multiple meanings of *φύσις*. Martijn navigates these difficult waters by analyzing in detail the three questions with which Proclus begins his commentary: what is nature, what is its origin, and where does it stand in the system of causes. She begins with Proclus’ very interesting synoptic history of the concept of nature, arranged, as she notes, in ascending metaphysical levels to which various thinkers have assigned it. Much of this is polemical, of course, since Proclus wants to grant to Plato alone the honor of having fully captured the essence of *φύσις*. The last theory discussed in this list, which equates nature with soul, Proclus rejects in what should be considered an oblique assault on Plotinus’ view of nature. Nature is like soul in some respects, but differs from it in such fundamental ways that it must be acknowledged as a separate entity. Its inseparability from bodies, its inability to move or revert to itself, its greater divisibility, and its irrationality are the chief distinguishing factors. Both nature and soul are what Martijn calls transitional hypostases, functioning as intermediaries between the indivisible and divisible, but nature has a much cozier relationship with the latter. Yet nature is not to be equated with ‘the natural,’ its products. As the efficient cause of all corporeal entities, it is separate from what it generates, and so is itself incorporeal. What emerges is a concept of nature that appears, in Martijn’s view, at odds with itself.
She arrives at this position by agreeing with Rosän and Siorvanes in their contention that, in accordance with the demands of Proclan metaphysics, nature, as an immaterial efficient cause, must be a transcendent monad. That is, nature must be Nature as well. Against these two scholars, however, she argues that this Nature, that of the universe, is participated, since it fits best in the realm of the lower order of unfettered gods, the encosmic divinities. Such a universal Nature Proclus considers to be immanent and irrational, and yet the carrier of λόγοι through which it is a rational, efficient cause. In this ‘irrational rationality of Nature’ Proclus challenges the Peripatetic φύσις. Still, without an imparticipable monad of Nature there remains a lacuna in the Proclan hierarchy of reality. Although this paradox has no resolution, she contends, it is somewhat blunted through the introduction of the two imparticipable causes of universal Nature, the Demiurge (or, more specifically, the paradigm of Nature in the Demiurge) and the life-giving goddess Rhea/Hecate, who is the source of that paradigm. This metaphysical structure gives Proclus the necessary means by which to expound his view that there is something other than soul, and something other than the Aristotelian φύσις, that generates life and motion in bodies and is their efficient cause.

Martijn turns next to Proclus’ treatment of Plato’s prooemium as an extended argument for the view that φυσιολογία is a proper discipline that employs the geometrical method. He wants to claim that the study of nature is a scientific endeavor that nonetheless falls short of being dialectic insofar as it is a hypothetical science that, in its focus on the world of the senses, is incapable of reaching an unhypothetical first principle. The two must be related if, as Proclus makes clear from the beginning of his commentary, philosophy of nature is a kind of theology. Martijn proceeds by following the order of Plato’s prooemium as Proclus conceives it, laying out the five starting points and the three demonstrations. Much of this section is devoted to discussion of the first two of these starting points, the definitions of Being and Becoming. As a ‘reconstruction of the universe’, the Timaeus begins with the question whether or not the universe is generated or, to put it otherwise, whether or not it belongs to the stratum of Being or to that of Becoming. And this question we can answer by investigating both of these strata. We begin by defining each term, and it is in this process that Proclus establishes the close relationship between φυσιολογία and geometry. Proclus’ definitions are not Aristotelian definitions, that is, they are not non-propositional. They involve claims of existence regarding Being and Becoming. But, as in the geometrical method, these existence claims are hypothetical in nature, such that no proof or justification is provided. Philosophy of nature follows geometry in presupposing the existence of its constituent concepts in definitions that require no demonstration. The initia of φυσιολογία are thus geometrical hypotheses and φυσιολογία itself is a hypothetical science that, rather than beginning with demonstrative
proof and moving upward to an unhypothetical first principle in the way of dialectic, moves downward from hypothetical starting points to conclusions. Proclus’ philosophy of nature does exceed the physics of Aristotle—and so exceeds as well the limits of traditional φυσιολογία—in explaining the world in its relation to its higher causes (in the course of which it introduces demonstrations after the hypothetical starting points), but does so through a process that is distinct from that of dialectic.

In analyzing the third and fourth starting points, Martijn describes the manner in which the prooemium incorporates examination of the efficient and paradigmatic causes of the universe, like axioms of geometry, into discussion of the definitions of Being and Becoming. This examination, according to Proclus, reveals the necessity of both causes for a generated world. Proclus also thought that the prooemium must contain each of the transcendent causes (efficient, paradigmatic, and final), and so reads into the starting points of the prooemium the final cause, although there is no support for such a move, since we find no mention of it in the account of the fifth axiom, where we should expect to find it, nor does Proclus provide us with an analysis of this highest cause.

Following the starting points are the demonstrations. To succeed in establishing that the philosophy of nature as it is unfolded in the Timaeus is a science, Proclus believed it necessary to show that the starting points of the prooemium are subject to the geometrical technique of conversion (rather than the weaker logical conversion of Aristotelian syllogistics). In the first demonstration, the proof that the world is generated, what in the hypotheses was the definition, “the generated is δοξαστόν”, is converted to “the δοξαστόν is generated”, so that δοξαστόν becomes a middle term of the definiens. Here, as Martijn sees it, Proclus gives special significance to the faculty of δόξα that matches on a cognitive level the status that nature (φύσις) occupies on the ontological level. Like nature, δόξα possesses innate rational principles (λόγοι) through which it comprehends the essence of the objects of sense perception. It is thus a faculty by which we can come to know individuals by bringing them under universals, without, however, coming to know the universals. It has a mediating function that ensures that our investigation into nature has scientific relevance. Indeed, Martijn goes so far as to assert that Proclus “…is introducing an actual new level of cognition…”, which becomes “cognition of the intermediate” when it operates in conjunction with λόγοι, the former associated with the realm of becoming with the capacity to know the essences of things and the latter with the realm of being with the capacity to know the causes of things. This intermediate realm, which Proclus further divides into “that which is being and at the same time becoming” and “that which is becoming and also being”, is comprised of Time, Soul, universal Nature, and the immanent forms. Our ability to know this realm guarantees that φυσιολογία is properly a science.
and allows Proclus to claim that it to some degree attains to theology while staying within the boundaries of its own subject matter.

From this theological perspective on the philosophy of nature in the second book of his commentary, Proclus moves in Book III to a mathematical approach that investigates the body and soul of the universe. The notion of the ‘mathematization’ of nature leads Martijn to note the two distinctive positions taken in this regard: realism, according to which mathematical accounts in the *Timaeus* immediately represent physical qualities, and instrumentalism, which holds that such accounts indicate mathematical structures in the universe. Drawing from tradition, Proclus adopts a stance that effectively combines the two positions. Mathematics, occupying an intermediate place between the intelligible and sensible worlds, plays an important role in explaining nature, but there are limitations to what it can tell us about the physical world. It can reveal the rational structure of the world and its proximate causes, but falls short of laying bare a world that is not itself fully amenable to rational calculation.

In discussions of Proclus’ peculiarly Neoplatonic conception of analogy, which functions both as a mode of reasoning and as a descriptor of ontological relationships among entities at different levels of being, and of the role of the World Soul in his mathematization of nature, Martijn identifies two types of such mathematization, one that leads us up from the physical world to the higher Soul and another that brings us down from Soul to the material level. Proclus thus carves out for himself an intermediate position between the realists and instrumentalists with regard to the mathematization of the world. There is a real connection between mathematics and nature, but it is indirect and approached through analogy; mathematics can help explain the world, but not in isolation.

Martijn now moves to consideration of one of the most contentious issues in all eras of Platonism, how we are to understand Timaeus’ assertion that his discourse on the universe is to taken as only a ‘likely account’ (εἰκὼς λόγος). In this context she points to a general principle that Proclus consistently employs, that all accounts must be ‘like’ their subject matter, a rule that derives from Proclus’ view that a text is ‘essentially and naturally’ related to what it is about, which is in this case reversion to the demiurgic cause of the universe. Accounts are as natural as what they describe, and so have natural causes, λόγοι, which are themselves on a higher plane, and mediate between primary and secondary entities. Timaeus’ λόγος must be a blend of truth and likelihood, that is, a composite, insofar as its subject matter, the universe, is a composite. After summarizing contemporary efforts to interpret Timaeus’ statement, Martijn discusses how Timaeus’ λόγος of nature, while of itself essentially connected to its subject matter, also gains enhancement from the author. It is not enough that his account is a natural image of that to which it pertains; the exegete must embellish this resemblance through manipulation of
the text. In this way, according to Martijn, the process of interpretation mimics the dynamics of procession and reversion. The text is a natural image of the intelligible, and to this extent it can be said that it emerges from the intelligible, and by his control of it the exegete also moves the text closer to its source. Timaeus’ account and the dialogue as a whole and its considered, careful progression are a microcosmos of the ordered universe in the way in which they reflect both the rationality of nature and the structure of reasoning itself. The *Timaeus* is a didactic dialogue, a λόγος διδασκαλικός, inciting anagogy in its audience by its own assimilation to its source, which is most immediately the Demiurge and his activity, to which Timaeus as creator of his account and the account itself directly correspond. The dialogue is, then, a hymn to the Demiurge as well as a form of ‘scientific poetry’ that, as Proclus indicates, is better defined by its didactic function than by its poetic artistry. And these attributes are not incompatible with the view that the *Timaeus* is a text of significant scientific precision.

In her study Martijn sets out for herself a twofold task, first to present a careful analysis of Proclus’ mathematicization of the φυσιολογία of the *Timaeus*, and then to consider its mode of discourse in Proclus’ interpretation of the ‘likely story’. The technical intricacies of the first part of the book will be daunting for many readers, and her steady, detailed unfolding of Proclus’ application of the principles of geometry to the philosophy of nature is therefore welcome and usually effective. She often defers detailed discussion of important points to later sections, so that by the end of the book her debt is great. This tactic would fail without careful and thorough summarization in the concluding chapter, and Martijn does not disappoint. She weaves all of the dangling threads of her study into a neat tapestry revealing a design to her study that is at times elusive in the earlier chapters. But then she is examining an expansive commentary that does not always lend itself to tidy categorization. She stays exclusively within the context of the commentary of Proclus, a decision that is at once a strength and a weakness of her approach. On the one hand such a dedicated analysis provides us with new insight into the dialogue as Proclus’ interpretation of Plato’s cosmogony and cosmology as being components of a true science of φυσιολογία, and uncovering the relation of this science to his theology. But there is no attempt to ground this exegesis in the rich Platonic tradition that clearly helped to inform it. The distinction of the philosophy of nature, as an area of philosophy, from both dialectic and mathematics had a long history among commentators on Plato. An early example comes in a statement from the Platonist Eudorus of Alexandria, from whom we learn that the Alexandrian mathematician Diodorus proposed a distinction between φυσιολογία, which is concerned with substance, and mathematics, which deals with the ‘accompaniments’ (παρεπόμενα) of substance (Achill., *Comm. in Ar.* 30, 20-29 Maass). Particularly pertinent to Martijn’s interests is Alcinous’ division of
theoretical knowledge into theological, physical, and mathematical levels. While not rising to the status of true knowledge, since it can never reach the unhypothetical first principles as does dialectic, mathematics does exercise anagogic powers when pursued for higher purposes. And then it leads specifically to understanding of the Demiurge (Didask. 7.1-5). There is the tendency as well among those influenced by Aristotle to regard the branches of mathematics, geometry, arithmetic, and music, as individual sciences that confine themselves to the areas of quantity and harmony and so are inferior to the philosophy of nature with its broader scope. And we are advised not to base our arguments concerning the nature of the world on mathematical principles, since this would constitute the error of μετάβασις εἰς ὄλλο γένος, which is addressed by Aristotle at Anal post. I 7.¹ But in light of Martijn’s success in providing a controlled and balanced analysis that reveals both the complexity and integrality of Proclus’ philosophy of nature, this is a minor complaint.

John Phillips
University of Tennessee at Chattanooga
John-Phillips@utc.edu