

# Foundations of Ecology in Plotinus' Neoplatonism

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# Foundations of Ecology in Plotinus' Neoplatonism

Michael F. Wagner

In general usage, 'ecology' refers to the study of ecosystems – the study, that is, of relationships and interactions between living organisms and between living organisms and their physical environment.<sup>1</sup> In practice, it denotes an evolving network of scientific disciplines<sup>2</sup> whose results are often thought to have normative implications – to imply, or at least support, certain values, normative commitments, and ethical or political priorities regarding the natural world and our behavior towards or management of it. Here, I shall not address this latter (normative) aspect of ecology in detail.<sup>3</sup> My primary interest here is rather the *prima facie* incompatibility of Plotinus' Neoplatonism with contemporary ecological science's understanding of the natural world.

Plotinus' Neoplatonism sees the natural world<sup>4</sup> as a final product or outcome of his metaphysical order of vertical causality – of his procession (*proodos*) originating from and by his first principle of existence, the One, as it proceeds first to constitute his principle of nature's order and lawfulness, Intellect, and this in turn gives rise to Soul as the proximate vertical cause of the natural world and its denizens.<sup>5</sup> Two features of this vertical order are especially pertinent here: its eternality, and its essentialism. The former is implicit in its being a *metaphysical* causal order. It does not itself occur in time. Indeed, time – the natural world's temporality – eventuates from it.<sup>6</sup> Consequently, at any given time (in the natural order) what exists or transpires at that time is entirely an outcome of it – is completely intelligible and explicable in terms of it. Plotinus' essentialism,

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<sup>1</sup> Owen (1974) 1; Odum (1983) 13.

<sup>2</sup> Including, for just a few examples, population ecology, molecular ecology, marine ecology, biogeography, behavioral ecology, community ecology, and of course human ecology; as well as relevant aspects for example of evolutionary biology and climate studies.

<sup>3</sup> For this, see Blakeley (1997); Blakeley (2004); Corrigan (2009); Lea (2002); Westra (2002).

<sup>4</sup> Or, the sensible world: Here I shall gloss over the distinction in Plotinus.

<sup>5</sup> See Armstrong (1967) 250-6; and Hutchinson (2015) 159.

<sup>6</sup> See Manchester (2002) 81-2; O'Meara (1996) 75; and Wagner (2018).

moreover, underscores that this indeed applies to *everything* that exists or occurs in the natural world.<sup>7</sup> And this metaphysical state-of-affairs encompasses, extends equally to, the assembled totality of temporal loci in the history of our cosmos, suggesting the image of the natural world as a final descent or temporal unfolding<sup>8</sup> of Plotinus' archetypal cosmos (Intellect).

Whereas, consider even just ecology's focal concept of ecosystems. Ecosystems are thought of today<sup>9</sup> as among other things dynamic, complex, adaptive, and typically hierarchical. Here, 'dynamic' for example does not mean merely that the natural world is a world of change, motion, and coming-to-be, nor 'complex' merely that it is, well, complicated. Rather, such related notions as non-linear, emergent, chaotic, and holistic also apply here. Together, the image of ecosystems conveyed by these sorts of notions is meant to contrast first and foremost with thinking of ecosystems as closed deterministic systems. They are of course subject to external conditions and influences but equally also to random internal perturbations, especially in and owing to their organic components. Moreover, how a given ecosystem responds at a given time to such influences and perturbations, or even the degree to which it responds (changes), is not deducible from its previous state according to deterministic principles or laws. Nor can we expect it to respond in the same way or to the same degree at different times to the same or similar influences or perturbations. Indeed, at least some degree of novelty with respect to its previous history, and to that of various of its components and denizens, is always possible.<sup>10</sup> Accordingly, while ecological science doesn't think of ecosystems as chaotic in the Classical sense of

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<sup>7</sup> E.g. *Enn.* II.4.8, 19-28 & 9, 8-10; III.6.16, 1-10 & 17, 27-31; IV.3.12, 27-28; V.7.3, 10-12. Regarding Plotinus' critique of and departure from Aristotelian essentialism, see Gerson (2002) 66-8; and Wagner (1996) 157-63.

<sup>8</sup> E.g. *Enn.* V.7.3, 16.

<sup>9</sup> I do not mean to imply that this is not still a subject of debate among ecological scientists [see Pahl-Wostl (1995) 193]. But, even if my characterization of ecosystems below refers to unusual, exceptional, or ab-normal cases, that is enough to contrast it with Plotinus' perspective as I portray it above.

<sup>10</sup> The concept of emergence thus applies to ecosystems both vertically and horizontally – that is, both in that they have states or properties not reducible to those of their constituents and denizens and in that those states or properties could not have been known or predicted from their previous history or that of their constituents and denizens.

unintelligible, disorganized, unconstrained, or the like,<sup>11</sup> its image of them seems very different from Plotinus'.

But, this is not the only image of the natural world we find in Plotinus' *Enneads* either. At times, that is, Plotinus himself seems to challenge the foregoing final descent, temporal unfolding image of his *proodos*. In what follows, I shall consider several examples of this in his *Enneads* and argue that far from being incompatible with that image of his *proodos* they provide substantial insight into Plotinus' own understanding of it while revealing it to be at least compatible with contemporary ecological science's general understanding of the natural world.

A common feature of the texts I am considering here is an at least implicit (sometimes explicit) comparison between components of or denizens in the natural world and those of or in the archetypal cosmos (Intellect). In one case, Plotinus opines that such things as filth and mud and the products of putrefaction (i.e. maggots) simply do not correspond to any ideal forms at all. Rather, Plotinus tells us, soul draws such things as these from matter itself, and does so because it is unable to produce anything else.<sup>12</sup> My other exemplary texts have in common that they envision a circumstance where the final outcome of Plotinus' *proodos* is an organism which is not as it should be, or as one would expect it to be, given its correspondent nature, form, or formative-principle.<sup>13</sup> Significantly, in every case, though, the organism is not only different than it should be, or than one would expect it to be, but is therein considered to be inferior – to be deformed, deficient, or at least imperfect. In two passages,<sup>14</sup> Plotinus opines that this being the case may simply be a random occurrence – a result of mere chance (*ek tyxes*). More commonly, however, he

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<sup>11</sup> Whereas, in contemporary ecological science, an ecosystem is said to be “chaotic” inasmuch as it is highly sensitive to external influences or internal perturbations and its response (subsequent condition) is not deterministically predictable [see Pahl-Wostl (1995) 23-7].

<sup>12</sup> *Enn.* V.9.12, 8-18. Presumably meaning in particular that it is unable, given the material conditions confronting it, to produce something which does conform to some form. Plotinus refers to conditions where a soul's productivity and effectiveness is constrained by material conditions “necessities” (*anangkais*).

<sup>13</sup> Plotinus typically uses these three notions – *physis*, *eidōs*, and *logos* – interchangeably.

<sup>14</sup> *Enn.* III.2.7, 40, and V.9.10, 6.

appeals to the pertinent soul's weakness or limited abilities<sup>15</sup> and (or) to the obstructive, recalcitrant, or complicating affects of the material conditions in which it operates.<sup>16</sup>

But, although Plotinus does not always provide additional narrative and explanation for these sorts of passages, his *Enneads* do offer ways and respects in which they can be harmonized with his *proodos* conception of the natural world. Thus, Plotinus for example prefaces his discussion in *Enn.* III.2.11 by reaffirming his claim earlier (in *Enn.* III.2.7) that sometimes an organism may fail to conform to its formative-principle owing to chance or material necessity; but, having done so, he immediately shifts discussion from a particular organism's formative-principle to one corresponding to the totality of Intellect itself and he tells us regarding that formative principle that it

makes all these things as their sovereign, and wishes them to be as they are, and makes the things that are called bad according to reason, because it does not wish that all should be good, just like a craftsman who does not make everything eyes in his picture; in the same way the formative principle did not make everything gods but some gods, some spirits (a nature of the second rank), then men and animals after them in order, not out of grudging meanness but by a reason containing all the rich variety of the intelligible world. But we are like people who know nothing about the art of painting and criticise the painter because the colours are not beautiful everywhere, though he has really distributed the appropriate colours to every place ... or we are like someone who censures a play because all the characters are not heroes but there is a servant and a yokel who speaks in a vulgar way; but the play is not a good one if one expels the inferior characters, because they too help to complete it. (*Enn.* III.2.11, 2-17, tr. Armstrong)

What from an as it were horizontal perspective might seem to be a case of some organism failing to conform to its ideal form owing to chance or material necessity, from Intellect's vertical "sovereign" perspective instead reflects the rich and complex diversity of its contents. Indeed, although Plotinus here mentions just such general sorts of things as gods and humans and animals, he elsewhere (in *Enn.* V.7) argues that in fact the diversity and multiplicity of formative-

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<sup>15</sup> E.g. in *Enn.* II.3.16, II.3.17, and III.2.7.

<sup>16</sup> E.g. in *Enn.* II.3.12, II.3.16, II.3.17, V.7.2, and V.9.10.

principles in Intellect fully corresponds to the diversity and multiplicity of organisms in the natural world. Every structural, organic, or qualitative difference whatsoever between organisms, he argues, indicates a correspondent difference in their respective formative-principles.<sup>17</sup> And he draws a couple significant inferences from this. He observes that although he attributes *prima facie* ugliness<sup>18</sup> to the affects of material conditions (or, that is, to matter), in fact “even then the perfect formative-principles are present, not overtly but still wholly present” [*Enn.* V.7.16-8]. He also concludes that therefore it likewise is a mistake to take for example some one human being or sort of human being as somehow a model (*paradeigma*) for human beings generally – for human beings in their actual diversity [*Enn.* V.7.1, 19-22].<sup>19</sup> Every human being, accordingly, just is as he or she is – indeed, as he or she “should be” – given his or her unique formative-principle and the material conditions in which soul instantiates or “unrolls” it; and every formative-principle is as “paradigmatic” as every other one.

Corresponding to Plotinus' “sovereign” formative-principle encapsulating Intellect in its totality and the multiplicity of diverse formative-principles responsible for the diversity of organisms in nature, Plotinus posits a world-soul overseeing relations and interactions between organisms and between organisms and their physical environment – and as well of course between components of the physical environment itself – and a diverse multiplicity of souls responsible for the structures and maintenance of particular organisms and for how they respond to one another and to their physical environment. In *Enn.* VI.7.7 (9-17), Plotinus characterizes the metaphysically prior productive activity of this world-soul as akin to its drawing a preliminary outline of the cosmos or to its providing tentative illuminings to matter, which then is detailed or given clarity and solidity by the diverse multiplicity of soul-powers that proceed from it and associate themselves with the particular organisms they articulate or instantiate. Regarding its subsequent oversight work, however, Plotinus cautions us in *Enn.* II.3.16 that it “is not freed from care for its work” as though it “has arranged [everything] once and for

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<sup>17</sup> Plotinus expresses uncertainty in the treatise over what to say about identical twins and seems, rather, mainly just to doubt that there ever really are such organisms – that two organisms could ever in reality be entirely identical to one another.

<sup>18</sup> and so, presumably, also imperfection, defect, deficiency, or the like.

<sup>19</sup> Plotinus may be intentionally distancing himself here from Aristotle and his essentialism [hence, see Sober (1980) 360-72].

all that it shall be in a good [stable] state forever; but it is like a farmer who, when he has sown or planted, is always putting right what rainstorms or continuous frosts or gales of wind has spoiled" [*Enn.* II.3.16, 32-6 (tr. Armstrong)].

Although part of the world-soul's job in overseeing the natural world (Plotinus told us just previously) is to take into account at a given time antecedent conditions and to strive to bring about consequent states-of-affairs which it is able to link back up with those,<sup>20</sup> Plotinus' *proodos* conception of the natural world need not be understood deterministically. For one thing, Plotinus' *proodos* conception is compatible with a multiplicity of scientific conceptions of the natural world's lawfulness,<sup>21</sup> including for example statistical or probabilistic ones.<sup>22</sup> Moreover, although Plotinus characterizes Intellect cryptically as "all power, ... the power to be all things" [*Enn.* VI.7.17, 32-4] and tasks it with ordering and limiting soul so as to make it rational by "giving it a trace of what it possesses" [*Enn.* VI.7.17, 38-9], it is soul that is tasked in Plotinus' *proodos* with translating what it thereby receives from Intellect into an actual (material) cosmos – with, in other words, determining at a given time and in given material circumstances how it will apply Intellect's "power to be all things" to further "unroll" its contents in a rationally coherent (broadly speaking) way.

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<sup>20</sup> *Enn.* II.3.16, 24-7. Presumably so as to generate as rational or coherent a cause and effect sequence of events or conditions as is possible "given the existing conditions." Presumably, too, even when this has world-soul *faux* manufacturing things (e.g. maggots) which Plotinus is aesthetically uncomfortable with ascribing a correspondent formative-principle.

<sup>21</sup> See Wagner (2002) 47-8.

<sup>22</sup> Indeed, in *Enn.* V.7.2, 7-12, Plotinus queries why children born of the same parents do not always look the same; and he answers that this is because while both parents contribute their formative-principles to all of their offsprings, it may so happen that in one case parts or aspects of one of their formative-principles predominate in the offspring and its own defining formative-principle (or form) while in another case parts or aspects of the other parent's forming-principle may end up predominating. In this regard, Plotinus does elsewhere postulate that world soul operates such that "when the same things come together, the same circumstances arise, then it is altogether appropriate that the same results should follow" [*Enn.* II.3.16, 22-3 (tr. Armstrong)]. Given that motion, variation, and change are inherent features of the natural world for Plotinus, however, one wonders whether the world soul ever finds itself confronted with (exactly) the same circumstances; and Armstrong's translation ('...it is...appropriate that...') reasonably captures the ambiguity and vagueness in the Greek text as to whether any sort of necessity is intended here regarding the world soul's operation.

Plotinus tells us that the relationship for example between human beings and their formative-principles is not akin to that between a portrait of Socrates and Socrates himself [*Enn.* V.7.1, 20]. The same applies, presumably, to the relationship between our actual cosmos and the archetypal cosmos. The actual cosmos, that is, is not somehow just a four-dimensional rendering of Intellect, or its contents; conversely, Intellect does not somehow “look” like the actual cosmos just *sans* its four dimensional materiality.<sup>23</sup> To think of the relationship between Intellect and the natural world in such simplistic terms overlooks, and certainly diminishes, soul’s role and task in Plotinus’ *proodos* as well as misrepresents the nature of Intellect itself.

Plotinus appeals to material conditions (or, matter), we have seen, mainly when he wishes to call attention to the difficult and complex labors souls endure as the proximate vertical causes of the natural world and its denizens, or else when he wishes to account for *prima facie* ugliness, imperfection, or the like, in the natural world or on the part of its denizens.<sup>24</sup> Nevertheless, the material conditions world-soul generates by virtue of its “preliminary outlining” or “tentative illuminings” really do confront it with challenges and perhaps uncertainties, or at least choices, as it proceeds in its subsequent task of effecting, maintaining, and monitoring nature’s processes and denizens. One way to think of this is to see the materiality of the natural world as something wholly new, as truly emergent, in relation to anything and everything which vertically speaking had transpired thus far in Plotinus’ *proodos*,<sup>25</sup> and so something for which what soul

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<sup>23</sup> Plotinus explains, rather, that Intellect merits the status or name of archetypal cosmos just because it “does not stand apart from itself and is not weakened by division and is not incomplete even in its parts, since each part is not cut off from the whole; but the whole life of it and the whole Intellect lives and thinks all together in one, and makes the part the whole and all bound in friendship with itself, since one part is not separated from another and has not become merely other, estranged from the rest; and, therefore, one does not wrong another, even if they are opposites. And since it is everywhere one and complete at every point it stays still and knows no alteration; for it does not make as one thing acting upon another” [*Enn.* III.2.1, 28-37 (tr. Armstrong)].

<sup>24</sup> See Armstrong (1967) 256-7; Narbonne (2014) 233-5; and O’Brien (1996) 172-81.

<sup>25</sup> Perhaps this in effect is what Plotinus has in mind when he tells us that in its production of the natural world and its denizens soul does not merely “make in accordance to the forms” but adds “a contribution of its own” to its making [*Enn.* II.3.17, 19-21]. In this regard, see also *Enn.* VI.7.9, 39-46. Though consequently indeed real, it remains a central tenet in Plotinus’ Neoplatonism that the material



receives from Intellect does not fully prepare it. Accordingly, while Plotinus is adamant that the operations of world-soul are not akin to human deliberation,<sup>26</sup> the comparison is not without instructively metaphorical value.<sup>27</sup>

Consequently, too, from our perspective as human observers of the results of soul's vertical productivity and horizontal labors, deciphering soul's intermediation between the archetypal cosmos (Intellect) and the natural world is epistemically challenging. Although Plotinus' criterion for (true) knowledge is grounded in our intellectual nature and its relation to Intellect,<sup>28</sup> I have already indicated that Plotinus' conception of his *proodos* supports a multiplicity of scientific perspectives on or approaches to the natural world and its lawfulness.<sup>29</sup> Arguably, too, the precise character and extent of our understanding of the natural world at a given time is for Plotinus highly contingent on what has transpired in the natural world thus far and our empirical knowledge and understanding of this.<sup>30</sup> For this reason, too, Kevin Corrigan is surely correct to observe:

While the Plotinian view of nature is very different from *any* modern view, it is nonetheless generally broader in scope, potentially multi-dimensional insofar as it is capable of embracing problems of both order and disorder, and much more subtle than may at first appear.<sup>31</sup>

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(natural) cosmos is not only dependent for its reality – for its actually existing – on its being an outcome of the *proodos* but it therein is less real than what precedes it in the *proodos* – and such that it does not merit being classified as having or being substance (*ousia*) in its own right [see Chiaradonna (2014) 220-5].

<sup>26</sup> See *Enn.* II.3.17, 9-17.

<sup>27</sup> Recall for example Plotinus' own comparison of world-soul to a farmer confronted with maintaining and managing his crops in the face of environmental conditions, influences, perturbations, or the like.

<sup>28</sup> See Gerson (2014) 268-72.

<sup>29</sup> Or, as Kevin Corrigan expresses it, in Plotinus' Neoplatonism "intelligence, far from being a single paradigm of rationality ... is more like a variegated continuum of different intensities of organised life, that allows for a sort of natural selectivity, of which we see only the last manifestation" [Corrigan (2015) 139].

<sup>30</sup> Thus, see Corrigan (2009) 258. Indeed, in *Enn.* IV.8.17 (33ff.), Plotinus depicts world-soul as itself unaware of the powers it has and possesses – that is, of its inheritance from Intellect – until it exercises them and observes their outcomes.

<sup>31</sup> Corrigan (2009) 257.

How, though, does this relate to the normative stance often associated with ecology – to what might be summarily termed its environmentalism? As I noted at the outset, Plotinian scholars have quite thoroughly and rigorously explicated and documented the many and various ways and respects in which Plotinus' conception of the natural world and his *proodos* of its vertical aetiology support and sometimes even articulate environmentalist values and principles. Arguably, however, recognizing that Plotinus' Neoplatonic account of nature and its aetiology also is consistent with and even supportive of contemporary ecological science itself significantly contributes to that discussion especially where or insofar as contemporary environmentalist values and principles derive from the conceptions and outcomes of that science itself.

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