The Ecology of the *Critias* and Platonic Metaphysics

Owen Goldin

*Marquette University, owen.goldin@marquette.edu*

Plato cannot be said to have been an ecologist. That is to say, his biological studies did not attend to the relations between living beings and their environment. Our evidence for Plato’s biological thought is almost exclusively found in the Timaeus, which considers particular living beings as images of Form. Each living being is a copy of the Form of some particular animal, and all of these forms are parts of the Form of Animal (or Living Being) as such, of which the cosmos as a whole is said to be a copy (30c–d). Each of the copies is a body vivified by soul, whose proper motions are the regular cyclical motions of thinking (36d–37d, 42e–44d). Human beings are teleologically organized to allow these cyclical soul-motions to occur with as little bodily interference as possible (47a–e). All other living things are understood as deformed versions of humans (42b–d, 91d–92c). Those humans who attend unduly to things of the body have their souls reincarnated in bodies that render the cyclical motions of thought even more difficult. Such reincarnated humans are the other animals and plants. No attention is paid to differences in nutrition and other life processes, nor to how success in these areas depends upon differences in habitat.¹

Each living thing apparently has a twofold purpose. First, it is to be as adequate an image of its ideal pattern as possible. Second, its soul must participate in the circular motions of intellect in as undisturbed a manner as possible. In both cases, the telos of each being is exclusively internal to each being as such. That is not to say that what one living being does may not have the effect of being to the advantage of another. Obviously, this sometimes occurs, as when a person feeds a horse. Does this happen on a universal level, as part of the natural order? Nothing that Timaeus says commits one to the view that the welfare of any of the parts of the cosmic animal depends on that of any other. We are missing even the strongly
anthropocentric hierarchy of Xenophon's *Memorabilia* 4.3, according to which the whole natural world is designed and established by the gods to serve human purposes.

But although it would be an overstatement to say that Plato was an ecologist, there are passages in his writings that show insights important to ecological thinking. My focus here is on a passage in which Plato apparently suggests that the overharvesting of timber has led to erosion in the lands around Athens and to a general decline in their ability to sustain life. This passage seems to show an awareness of the interdependence between human activities and the health of the land that is without precedent in ancient Greek thought. It is worthy of close attention in order to determine exactly what Plato says and does not say. Once the passage is understood on its own terms, in its own context, it is not inappropriate, I think, to consider how the insights expressed by Plato might find a place in his metaphysical thought.

The *Critias* immediately follows the *Timaeus*, which begins with Socrates' summary of a discussion, said to have occurred on the previous day, in which the nature of the best polis was discussed. His discussion follows the main lines of the discussion in the *Republic*, with the rule of the philosophers left unmentioned (17c–19a). Socrates reiterates his 'desire to see his creation in action, taking part in some great battle (19b–20c). At this point Critias indicates that he has heard an ancient tale about the heroic exploits of Athens in its battle against Atlantis. It so happens that Athens at that time conformed to Socrates' account of the best society. Thus the static, ideal image of justice sketched by Socrates can be seen to come alive through the telling of a historical story in which the society is concrete, given a determinate place in space and in time.

Critias's story is preceded by the grand metaphysical cosmogony of Timaeus. Unlike Socrates' community, that of Critias is embodied and is subject to the variability and imperfection that mark all embodied being. Accordingly, Critias's account requires the metaphysical background of the account of Timaeus, which explains what it means to be embodied and the problematic relationship that soul has with the body in which it finds itself. 2

Critias begins his account by describing the natural environment of ancient Athens. In accordance with the introductory account of the *Timaeus* (22d–23b, 25c–d), this land is said to have been subject to periodic torrential floods, which wiped out all inhabitants except the illiterate mountain dwellers, and thus ancient Athenian history is said to have been lost to all but the Egyptians, who are spared such disasters.

In spite of such periodic devastation, Critias affirms that the Athenians
are under the direct care of the gods. He tells us that different gods were allotted different land areas, not, as conventional myth has it, on account of the way their various quarrels turned out but on account of the intrinsic characteristics of the various land areas (109b). Athens, a land conducive to the development of wisdom and the arts, is accordingly allotted to both Athena and Hephaestus. These are deities of the traditional Greek pantheon, but they have been purged of moral failure, in accordance with Socrates' reformation of religious myth in the Republic, books 2 and 3. Insofar as it is these deities who are said to have created and cared for human beings, they correspond to the lesser deities of the Timaeus, who carried out the wishes of the Demiurge in creating the various kinds of animals that the world contains (41a-d). But unlike these deities, they have the further role of directly steering human souls, guiding human conduct. Perhaps they are representations of the cosmic soul, personified for the rhetorical necessities of patriotic myth. If this is so, we again see one of the teachings of the cosmological myth of the Timaeus, that human life is rightly led by having the motions of the human soul be in accordance with those of the cosmic soul.

But how is this divine providence to be reconciled with the natural disasters said to wipe out all but uncivilized human life? Apparently there is a brute necessity to the workings of the physical world that renders unstable and impermanent the accomplishments of Athenian civilization. Thus, the power of divine providence is limited. Again, in the guise of a historical account, we see a poetic expression of one of the teachings of the metaphysical cosmogony presented by Timaeus: the directive force of soul can only go so far in ordering and limiting bodily reality.

Critias continues his description of the natural environment of ancient Athens by extolling the excellence of the soil:

That soil was of surpassing excellence, and this allowed the land at that time to feed a great army, which was free from working the soil. The following is significant evidence of this excellence. What soil remains is a match for the soil of any land, in bearing large quantities of all sorts of crops, and in being good pasture-land for all animals. But at that time, the land not only gave us fine things, but gave us a great abundance of them. (110e–111a)

Both the early Athenians and the land on which they dwell are said to have natural virtue. At least on the literal level of the myth, the first Athenians came from this very soil; no doubt the excellence of the soil was to a large extent responsible for the native excellence of the people. We have seen that it is this characteristic of the land that allows it to be particularly fitting for it to be assigned to the care of Athena and Hephaestus.
But Critias has something else in mind when he indicates the native excellence of the Athenian soil. For a farmer, "good soil" is soil that is fertile, allowing one to achieve both quantity and quality in the harvest. Without an account of the nutritional composition of good soil, excellence of soil would need to be taken as a given, not further analyzed in terms of the chemistry of the *Timaeus* or in any other way.

At any rate, Critias is here pointing out that, in the beginning, the land was the kind that an ideal community would require. The Athenians would not be limited to subsistence farming, since the land could sustain a sizable population of citizens free from working the earth. Critias indicates that what soil there is in the area is still of this high quality. The loss, albeit severe, has been in quantity alone. Nonetheless, it should be pointed out that even this casual observation calls into question the extent to which the Athens of the time of the dialogue could support the ideal community. Without the capacity to support itself from its own lands, it, like the feverish city of the *Republic* (373d–e), would need to take others' lands. Critias's remarks seem to indicate that contemporary Athens could never meet the standards of Socrates' ideal community.

Critias's comparison between the land then and the land now indicates an awareness of the dependence of the well-being of humans, and the living things on which they depend, on an uncertain and unstable state of the land as such. But what are the causes of the land's degradation?

Critias's answer is complex:

Now since many huge cataclysmic floods have occurred in the last nine thousand years (for these events were that long ago), the earth that erodes during these times and events leaves no deposit worth mentioning, as it does in other places, and it is always carried away, spiralling into the depths of the sea. So, as in the case of small islands, the remaining lands (compared to those back then) are the bones of a body ravaged by disease, with all of the soft fat earth having wasted away, leaving behind only the earth's emaciated body. But then, when the land was still pristine, today's mountains supported high hills, and what we call the Stony Plains were full of rich earth, and in the mountains there was a good deal of timber, of which there are clear indications even now. Some of the mountains can sustain only bees these days, but it was not long ago that they were wooded, and even now the roofs of some of our largest buildings have rafters cut from these areas and these rafters are still sound. There were also many tall cultivated trees, and the land offered a vast amount of pasture for animals. What is more, the land enjoyed the annual rain from Zeus, not lost, as now, when it flows off of the bare earth into the sea. Rather, much of it was retained, since the earth took it in within itself, storing it up in the earth's retentive clay, releasing water from the high country into the hollows, and supplying all regions
with generous amounts of springs and flowing rivers. That what we are now saying about the land is true is indicated by the holy sanctuaries, which are situated where this water used to spring up. (111a–d)

The blame for the degradation of the soil is laid first on the regular cataclysmic floods and the peculiar topography of the area around Athens. It was these same floods that periodically wiped out wisdom and ancient history. Through contact with Egypt, lost learning was renewed. In contrast, lost soil could not be regained, because the floods washed away the soil into the irretrievable depths of the sea. In other areas, eroded soil is simply deposited elsewhere and provides new rich and fertile grounds for farming. But around Athens the old soil was supported by a steep rocky framework, with no lower framework to retain the eroded soil before it slid into the sea. This is why the land around Athens is by and large rocky and bare.

Critias then presents two pieces of evidence for the past abundance of good soil. First, he points to some rafters that still do a fine job of supporting the roofs of some of the larger buildings around Athens. Although these rafters evidently came from trees in the mountains, there are no longer any trees of such size in those parts. The implication seems to be that the mountains no longer have enough soil to sustain such trees; this is why the evidence that such trees existed is evidence that there was once more abundant soil.

Critias indicates that during his time one finds a number of sacred sanctuaries, traditionally established in verdant areas, by springs and streams, where there is no water at all. One can infer from this that areas that are now dry and rocky were once able to retain water, which flowed into underground caverns and welled up as springs. These springs are now absent, because the soil which contained the underground waters is gone. All that is left is the bare rock, from which the water runs down directly to the sea.

From the point of view of today’s ecology, the implication is obvious. The rise of Athens coincided with massive deforestation of the mountainsides. There were two consequences of the loss of root structure. First, water could not be taken up into the biomass. Second, there was nothing to keep the hillsides from eroding away. The floods, the distant memory of which Plato is reporting, may well have been caused by this erosion. There is no evidence, though, that Plato recognizes a causal link between the deforestation and the floods.

But not all erosion occurs through mudslides and violent flooding. Plato apparently recognizes a causal connection between the deforestation and
a less sudden form of erosion, for Critias remarks that there were forests in
the mountains not long before his time. The mountainsides must have
been covered with timber at a time after the last flood, for otherwise the
last flood would have washed away the buildings whose rafters provide
evidence for the old forests. It follows that even after the last cataclysmic
flood, there was enough soil to sustain a forest. Likewise, the sanctuaries
to which Critias refers would have been washed away by the latest floods.
Their survival is another indication that the soil, which had once retained
significant amounts of water, had washed away on account of human
activity. Plato sees that deforestation contributed to the degrading of the
land itself.\footnote{11}

So there is some support for ascribing to Plato a recognition that the
welfare of the human community depends on that of other living beings
and that this, in turn, depends on human prudence concerning the conse­
quences of what is done to other living beings. No larger moral is drawn,
but it is remarkable to see in Plato even a glimmer of this central insight.

Plato is one of the great synoptic thinkers; he is always well aware of
the implications that one of his theses has on the others. Though Plato
nowhere takes up this issue, it does not seem out of place to speculate on
the relation of his ecological insight to his metaphysics.

We return to the metaphysics of the \textit{Timaeus}. The prospect of wide­
spread environmental degradation might seem to call into question the
stability of the order of this cosmic organism. But Timaeus makes clear
that the Demiurge is making the cosmos an explicit exception to the prin­
ciple that anything that comes to be (or is subject to the flux of becoming)
also passes away. The living animal as a whole is a single, self-regulating
organism that is not to suffer degradation or decay (32c-34b). The living
cosmos is, was, and always will be as good a copy of the ideal animal as
is possible.

This means that any environmental degradation must be local, tempo­
rary, or both. Ecological decay would be analogous to the sort of political
decay discussed in the \textit{Republic}, books 8 and 9, and is presupposed by the
story of Athens and Atlantis that is the context for Critias’s remarks about
environmental degradation. Humans flourish and best exemplify the
ideal of humanity when their lives are located in the sort of political struc­
ture that Socrates had outlined. But such a structure itself is subject to the
flux and perishing that permeate bodily existence. A good society will
inevitably decay into something worse. Likewise, on the merely biologi­
cal level, human beings and, for that matter, forests flourish best given
certain conditions. But these conditions, too, are impermanent, on account
of both the natural instability of land forms (making them apt to be
washed away by naturally occurring floods) and the foolishness and shortsightedness of humans, impelled as they are to do many things, such as cut trees for timber, in order to meet the demands of the body.

There is a bit more to say here. The Greeks were familiar with the mythical notion of a long-ago past in which the land was verdant, offering its fruits in abundance and providing the setting for an ideal human life. It would have especially reminded them of Hesiod’s Golden Age (Hesiod Works and Days 129–47). The contrast with a Golden Age was the mythical basis on which Lucretius presented the idea of a senescent world, losing its vitality and fertility as part of a natural process of dissolution (De Rerum Natura 2.1157–68, 5.782–836). The Timaeus gives the earth more credit than that. But in another work, Plato, too, toys with the notion of a Golden Age and a world that no longer offers its bounty as it did of old. In the Statesman’s Myth of the Reversed Cosmos, world history is divided into alternating eons. During one, the world is directly controlled by a divine Demiurge. During the other, the cosmos is left to its own devices, its motion and order derived from its own thinking, dependent on its memory of the previous order (271d–e, 272d–273e). As is the wont of embodied souls, memory becomes progressively more muddled, and the world becomes ever more chaotic, until the cosmos threatens to be lost in chaos. It is at this point that the Demiurge again steps in.

During the era of the direct control of the god, the earth gives its bounty without stint; since this is not the case now, human beings require the arts, including agriculture and, the Stranger hints, perhaps philosophy itself (271e–272d).

A full interpretation of this myth cannot be given here. For the present let it suffice to say that, questions of dating apart, the myth of the Statesman and the cosmology of the Timaeus share a number of turns of phrase and metaphysical teachings. This has led to the view, promoted by the Neoplatonists but not without its contemporary adherents, that the alternating eons mythically represent intelligible order and intransigent Necessity. The era of direct divine control is a representation of what the world would be like if it were a perfect copy of the Forms. But this is impossible, for such a world would be bodiless; indeed, it would be the intelligible world itself and could not have the status of a copy at all. The increasing disorder in the world is thus a mythical image of the imperfection of any bodily thing. It is this imperfection that is responsible for the human need to toil in order to survive, at the expense of the perfect continuous motions of the intellect.

Accordingly, the decay of the earth and the difficulty one has in relying on the earth to supply material necessities are not found in some particular
historical era but are permanent features of the realm of Becoming. The progressive decay of the lands around Athens can be seen as the result of soul’s falling short of wisdom. The nature of body as such is responsible for the fact that the world soul cannot perfectly direct the body of the world. Thus we have periodic catastrophic floods. Likewise, human beings inevitably err in regard to what is to their benefit as embodied beings. Thus we have deforestation and the erosion that results.

What, then, would be the Platonic perspective on ecological healing? Can the forests around Athens ever grow back? Can Athens have the abundance of fertile land it once possessed? If the nonliteral reading of the Statesman I have suggested is correct, any hope for healing through divine intervention would be vain. Ecological as well as political decay is to be considered as the result of inevitable imperfection and perishing in the realm of Becoming, which, as a whole, must be taken to be as beautiful and perfect an image of Being as is possible. Plato’s attitude toward political reform would signal his probable attitude toward ecological healing. Plato is a pessimist about politics. A healthy political community requires the unlikely combination of wisdom and political power (Republic 540d–e, Letter 7 326a–b). Nonetheless, though Plato himself despaired of ever being the agency by which such political reform can come about, his continued involvement in the lives and education of his own students and associates, shows that he did not lose all hope of improving the flow and flux of human affairs. Likewise, Plato would most likely despair of a perfectly healthy earth. But here, too, there is no reason to doubt that Plato would have taken it to be the part of a decent person to improve things by taking whatever steps he can.