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Arete and physics: The lesson of Plato's Timaeus

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Aretē and Physics: The Lesson of Plato's *Timaeus*

by

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John R. Wolfe

ABSTRACT

Plato's *Timaeus* is traditionally read as a work dedicated to the sole purpose of describing the origin and nature of the cosmos, as a straightforward attempt by Plato to produce a *peri phuseos* treatise. In accord with this reading, the body of Timaeus' monologue is then seen as nothing more than an attempt by Plato to convey his own cosmological doctrines.

I propose an alternative to the view that the *Timaeus* is nothing more than a textbook of Platonic physics. The *Timaeus* is rather squarely focused on the human being, in her moral and political dimensions, and on her relation to the natural world as a whole. Ultimately, this account of the human being is intended to provide part of the answer to the question of how society can produce good citizens and leaders, and thus serves to provide a theoretical basis for the practices of *paideia*. When viewed in this light many of the curious features of the *Timaeus* appear less strange. The various parts of the dialogue: the dramatic introduction, Critias' tale of the Ancient Athenians, and Timaeus' monologue can be seen as each contributing to an investigation of a single topic. It further allows us to understand why Plato chooses to employ Timaeus the Locrian as the principle speaker of the dialogue rather than Socrates.

Finally, when read in this way, the *Timaeus* no longer appears as an outlier in the Platonic corpus, as a work devoted to a radically different subject matter than the rest of his writings. It can be seen as dedicated to the same issues which preoccupied Plato throughout his entire life, as about the determination of the best life and providing the tools with which to realize it.

Introductory Note

Plato's *Timaeus* has been an object of fascination for well over two millennia now. This is due in part to a series of historical accidents, mainly its preservation for Europeans through the partial translations into Latin of Cicero and Chalcidius. There can be no doubt, however, that this fascination is also due to the qualities of the text itself. A work of such staggering scope, grace, and power has naturally appealed to speculative minds through the ages. One result of this enduring appeal is that it has generated a vast and varied body of commentary, beginning with Aristotle, who mentions it more than any other Platonic dialogue, and continuing with Proclus, Cicero, Schelling, and countless more.¹ In each era it is rethought, reinterpreted, and made to speak to the concerns of the day, whether these be investigation of the natural world, Christian providential theology, or working through the implications of Kant. This situation has continued into the present day.

The *Timaeus* is, however, no longer regarded as the centerpiece of Platonism, the key to all of his doctrines. Few, if any, take the physics offered therein seriously. Or, at least, few have since Heisenberg.² But, if nothing else, the current population explosion guarantees that, despite the proportional decline in interest in the work, the *Timaeus* now has more readers, more interpreters, than it did at any other point in history.

1 W. K. C. Guthrie, *A History of Greek Philosophy*, vol. 5 (London: Cambridge UP 1978) 241.

2 Gretchen J. Reydam-Schils, introduction, *Plato's Timaeus as Cultural Icon*, ed. Gretchen J. Reydam-Schils (Notre Dame: U of Notre Dame Press 2003) 13.

As a result of this, it is also nearly guaranteed that In what follows I have said nothing which at some point has not been said at some point in history, by some other commentator. Originality in Platonic scholarship is a rare thing. What I hope is, however, unique in what follows is the focus. I attempt in the pages that follow to present a reading of the *Timaeus* that foregrounds one of Plato's most intriguing creations, Timaeus himself. The work begins with an inquiry into the character of Timaeus the Locrian. The question is asked—who is this man, and what does his characterization mean with respect to the philosophical content of the dialogue? The clues given in Timaeus' characterization are developed into an account of the kind of wisdom that must be possessed by the *phusikos*. I attempt, following from this, a reading of the *Timaeus* that understands the monologue through understanding its speaker. Key in this reading is the account of the relationship between moral character and knowledge which I detail in chapter two. Timaeus, the character, is who he is because no one else could give this account of the cosmos, and the monologue is what it is because it is delivered by this particular character.

Pursuing this line of inquiry allows us to see the unity underlying what otherwise seems to be a splintered work. For example, Gadamer describes the *Timaeus* as “a kind of story which, in fairy tale fashion, is peculiarly loose, incoherent, and allusive.”³ Benjamin Jowett further tells us that it is “a composite and eclectic work of the imagination,” which fits poorly with the other dialogues (it is “a detached outbuilding in

³ Hans-Georg Gadamer, “Idea and Reality in Plato's *Timaeus*,” *Dialogue and Dialectic: Eight Hermeneutical Studies on Plato*, trans. P. Christopher Smith (Newhaven: Yale UP 1980) 160.

a different style”) and is possessed of little internal unity.⁴ What commentators such as these who puzzle over the seeming poor fit of the parts do not see is the essential connection between *aretē* and physics. Through the character of Timaeus the dialogue that bears his name retains its focus on the central Platonic issue of virtue and its relation to knowledge. Timaeus embodies a conception of inquiry which both requires and cultivates virtue. This cultivation does not stop with his own person, for in his dual roles as statesman and educator he provides the opportunity for his associates and his subjects to engage in this same cultivation. Of course, as Socrates tells us in the *Republic* the most ancient form of *paideia* consists of *mousikē* for the soul and *gumnastikē* for the body.⁵ Timaeus' *paideia* then must pay due attention to that part of nature which is the human body, a uniquely privileged component of the cosmos as it is both the object of study and the subject which studies. It is this concern which leads to the lengthy medical discourses of the second half of the work.

After having explored the characterization of Timaeus and the conception of knowing which this presupposes, I turn, in chapter three, to the introduction Timaeus gives to his own speech, the proem. Here we see how the right kind of person can deploy their powers so as to understand the nature of the cosmos and humanity. Or, to put it another way, we see a method of inquiry described, one which relies on the notion of an *eikōs muthos*, a plausible story. The final two chapters cover the remainder of Timaeus' monologue, where we see how the right kind of person deploys the method. In these latter chapters I touch but lightly on many of the passages that have been central

⁴ Benjamin Jowett, introduction, *The Dialogues of Plato*, Benjamin Jowett, ed. and trans., vol.2 (New York: Scribners 1907) 457.

⁵ *Rep.* 376e.

preoccupations of other commentators. The formation of the world-soul and the geometrical account of the elements are dealt with only briefly.⁶ These passages have been exhaustively dealt with elsewhere, and, whatever may remain to be said about the Platonic solids, there is more interesting work to be done which respects the unity of the dialogue in its ethical *skopos*. Rather, I want to show the reason for these discussions, to link them with the other parts of the dialogue which otherwise hang together awkwardly, if they hang together at all. Of other traditional puzzles concerning the *Timaeus*, I have said nothing at all. The debate about the identity of the missing fourth person from the introductory conversation, as tantalizing as it may be, is unlikely to be resolved barring the bodily resurrection of Plato. Thus I confine myself to an approach that avoids these obscurities, and attempts, as best as possible, to extract the philosophical meat of the work, emphasizing those aspects which bear on what I take the aim of the work to be.

⁶ These topics are discussed widely through the literature, but perhaps the best expositions are F. M. Cornford's lucid and historically comprehensive treatment, and Donald Zeyl's clear and brief account.

1: Dramatic Prologue

The way one understands the proem to the *Timaeus* shapes one's understanding of the work as a whole. The converse, however, is also true. One's understanding of the purpose and structure of the *Timaeus* as a whole necessarily informs the way the proem is read. Thus, in order to determine the correct way to understand the proem, it is necessary to investigate the context in which it appears—bounded on one side by the body of Timaeus of Locri's monologue, and on the other side by the introductory story. In this prologue Plato provides us with a number of subtle but important cues which determine how we ought to understand what follows.

The investigation of the prologue involves a few tightly interrelated questions. The first of these, the root of all the others, is the question of Timaeus' identity. Who is Timaeus? What would this figure have represented to Socrates' fifth century audience, and to Plato's fourth century one? This, in turn, gives rise to the question of why he, rather than Socrates, is given the principal role in this dialogue. Since Socrates is present throughout the dialogue an examination of his attitudes towards, and reactions to, Timaeus is useful if not necessary. However, Socrates is a character who, due to his famed irony, more often than not, cannot be taken at face value. This raises further questions about whether we should take his expressions of praise for Timaeus as unproblematically true, or as ironic statements, and whether his uncharacteristic silence

during Timaeus' speech should be interpreted as expressing approval, or as demonstrating incredulity, disinterest, or something else entirely.

The characters represented in Plato's works are, more often than not, historical personages. Often, there are levels of meaning to the dialogues that cannot be unlocked unless one understands who these people are. Knowing, for example, the ignoble course the life of Alcibiades actually took adds a note of tragic irony to both the *Alcibiades I* and the *Symposium*. If Timaeus himself is such a person it would be necessary to determine who he really was beyond his presentation in the dialogue which bears his name. The complete lack of historical documentation on him would present a real barrier to interpretation. I, however, operate under the assumption that he is not a historical figure. Rather he is a purely an invention of Plato. Although it cannot be definitively ruled out that a historical Timaeus existed, we have a distinct lack of any independent evidence that he did. When one considers that Timaeus is described as wealthy, eminent in philosophy, and a holder of Locri's highest offices, the absence of any evidence for his existence can quite reasonably be construed as evidence that he did not exist.⁷ The work entitled *On the World Soul and Nature* which was in antiquity attributed to him has since been convincingly dismissed as a middle or neo-platonic work that could not have predated Plato's dialogue.⁸ The only other significant references to him occur in Iamblichus' *Pythagorean Life*, where he is listed among prominent Pythagoreans, and in Cicero, where it is twice said that Plato studied with him.⁹ Both of these sources are so

7 Francis MacDonald Cornford, *Plato's Cosmology*, (Indianapolis: Bobbs-Merrill 1959) 2.

8 Cornford 3.

9 Debra Nails, *The People of Plato*, (Indianapolis: Hackett 2002) 293.

late that it is unclear which traditions they are drawing from, and the inference to the simplest explanation is that they are merely extrapolating from the *Timaeus* itself.

Taking Timaeus's fictional status as working hypothesis, another consideration emerges.¹⁰ Timaeus is not the only character wholly contrived by Plato. If we survey the others in this category we find the Eleatic and Athenian strangers, characters who are markedly different from Timaeus. The strangers are simple blank slates; their character is defined only by the relationship they bear to the philosophical traditions they represent.¹¹ Plato does not follow this model in when writing the *Timaeus*. We do not find an “Italian stranger” serving as the chief character; rather, we find a precisely defined character who is given a biography, a role in the politics of his home city, and a defined field of expertise. This wealth of detail about Timaeus then would appear to be a deliberate move on Plato's part, since he goes to some lengths to relate all of this detail to us, we must assume that it is significant within the context of the dialogue.

Introducing Timaeus

If we are to make anything of Socrates' curious silence and the shift in speakers we must engage in some analysis of who Timaeus is, what he represents, and what

¹⁰ The most persuasive arguments for Timaeus' fictional status are given above. This represents the currently prevailing point of view on the matter. Cornford (4), Zeyl (xxvi), and Nails (293) are representative. Taylor (16 *et. Seq.*) seems to be the last major commentator to work with the assumption that Timaeus was a real historical figure. This consensus is, however, of recent origin. In late antiquity Timaeus, as well as Diotima, were thought to be real people with whom Plato studied. Skepticism about this point dates to the nineteenth century. (See Scott and Welton in *Who Speaks for Plato*.)

¹¹ Ruby Blondell provides a fascinating analysis of how the generic identity of the Eleatic Stranger and his respondents functions as a device to draw the reader out of the particular and into the universal, and how it functions as a challenge to Socrates' uniqueness. She, however, does not appreciate the importance of Timaeus' *specificity*, seeming to view him as a failed generic character. Ruby Blondell, *The Play of Character in Plato's Dialogues* (Cambridge: Cambridge UP 2002) 314-396.

philosophical ends Plato accomplishes by using him as a protagonist. The question of what Timaeus represents is, on the face of it, fairly easy. Socrates gives us a fairly thorough introduction which gives us a great deal to go on. Timaeus is introduced in three ways. First, through a form of negative description—we are told what Timaeus is not. Second, through Socrates' explicit description we learn of his positive attributes. Finally, we learn of the relation he has to the other persons of the dialogue.

Consider Timaeus' first manner of introduction. In the dramatic prologue to the *Timaeus* we find Socrates searching for an individual capable of narrating the story of a hypothetical polis, one seemingly similar to the *kallipolis* of the *Republic*. However, unlike the city described there, he expresses a desire that his polis be depicted as enmeshed in the fabric of actual human history, rather than as an ideal laid up in heaven or some convenient analogue thereof.

My feelings are like those of a man who gazes upon magnificent looking animals (*zōa*),¹² whether they are animals in a painting, or alive but standing still, and who then finds himself eager to look at them in motion, or engaged in some struggle or conflict that seems to show off their distinctive physical qualities.¹³

He mandates that this story involve his imaginary polis entering into a diplomatic and military conflict with another state and achieving results “befitting her training and education.”¹⁴ It is only by imagining how a supposedly ideal state would fare in the larger, less than ideal, world that we can see its true merits. Socrates displays his usual, faintly disingenuous, humility by immediately disqualifying himself from this task. He then gives a brief speech to the effect that neither the poets nor the sophists are qualified for this particular act of reasoned imagination. It is only after stating what sorts of people are not suited to fill this role that he names Timaeus as the only individual present who is up to the task.

This performance on the part of Socrates tells us two important things: that Timaeus is not (merely) a poet, nor is he a sophist. Socrates’ speech further informs us about the flaws in the methods of the poets and the sophists that render them unable to give the sort of account for which Socrates is looking. In giving this rather elaborate account of who is

12 This passage sets up a dynamic play between the two meanings of *zōon*, which continues throughout the *Timaeus*. The word can mean both animal, and image, as this passage with its contrast between animals and paintings of animals foregrounds. For Timaeus, the cosmos is *both* a living thing and an image of its eternal model. Further, Timaeus' monologue is itself an image of this animal created as a home for Socrates' image of the ideal society.

13 *Ti.* 19b-c. All translations are by Donald Zeyl, unless otherwise noted.

14 *Ti.* 19c.

unqualified for such a task Plato indirectly indicates what virtues Timaeus is supposed to possess.

Each of these types, the poet and the sophist, functions as a foil for Timaeus. Socrates' descriptions of them, define Timaeus by contrast. It comes as no surprise to the reader to find Socrates critiquing the character type of the poet. It is, after all, a position that Plato is famous for, and one which forms one of the central themes of the *Republic*. However, the critique of the poet found in the *Timaeus* differs in emphasis, if not in substance, from the related passages in Plato's more widely read works. The poets are presented as imitators to be sure, but the problem is not with the act of imitation itself. It is not that poets produce second order copies of things, but rather that they are not qualified to imitate what they do not know. The problem is the typical poet's lack of the type of experience necessary to effectively perform the task of *mimesis* required for the task Socrates has laid before the assembled group.

I have no disrespect for poets in general, but everyone knows that imitators as a breed are best and most adept at imitating the sorts of things among which they were brought up. It's difficult enough for any one of them to do a decent job imitating in performance, let alone in narrative description, anything which lies outside their upbringing¹⁵

The poet cannot effectively imitate what he does not know. The practical, experiential knowledge possessed by one who has led a politically engaged life in a well-governed

¹⁵ *Ti.* 19 d-e. The translation has been slightly modified. Zeyl uses "training" for forms of *τρέφω* and *ἐντρέφω* whereas I use "upbringing" and "brought up" respectively. Zeyl's choices are not technically incorrect, but they do destroy the sense of the passage.

polis is superior in kind to any knowledge which may be gleaned second-hand from the narratives of the poets. This practical experience functions as a prerequisite for the ability to communicate anything at all about the proposed subject matter. In this passage Socrates presents the poet not as a passive vessel of the divine, such as we meet with in the *Ion*, but rather as an active and skilled creator of discourse.¹⁶ Indeed his activity can be seen as analogous to that of the demiurge who fashions the cosmos in accord with *logos*.

The implication of this passage is that someone possessing the skills of a poet *could* tell the tale required by Socrates if and only if he possessed the right upbringing and education. Poetry, then, is a tool of philosophy when it is made the servant of real knowledge and skill, much as the art of the *rhetor* is portrayed in the *Pheadrus*. This is a timely realization for Timaeus since he is something of a poet himself. He is skilled in the narrative art to the extent that he can extemporaneously compose a lengthy cosmological soliloquy that has moments of incomparable beauty.

Timaeus also positions himself as a sort of mediator between the human and the divine—which is the traditional role assigned to the ancient Greek poet. This can be seen in the opening invocation he delivers at 27 c-d. Here we see an indication that Timaeus is capable of doing something that Socrates is not—he has real experience in the political arena, and this renders him capable of communicating things that Socrates, devoted to his private mission, cannot.

¹⁶ *Ion* 533d-535a.

Socrates' description of the character of the sophist, as the second foil for Timaeus, is just as instructive:

And again, I've always thought that the sophists as a class are very well versed at making long speeches and doing many other fine things. But because they wander from one city to the next and never settle down in homes of their own, I'm afraid their representations of those philosopher statesmen would simply miss the mark. Sophists are bound to misrepresent whatever these leaders accomplish on the battlefield whenever they engage any of their enemies, whether in actual warfare or in negotiations.¹⁷

This critique precisely parallels his critique of the poets. The primary problem with the sophists has nothing to do with either the new form of education they practice, or the sometimes questionable eristic methods they employ, or even with the dubious beliefs they impart in their students. Rather, it has to do with the fact that they are not woven into the fabric of the city state and therefore have no real conception of the civic life.¹⁸ The reference to “fine speeches” is also telling. Timaeus freely employs the rhetorical structures of his day in the composition of his monologue making him as much of a practitioner of rhetoric as of poetry.

¹⁷ *Ti.* 19 e.

¹⁸ This may, in fact, lie at the root of Plato's critique of the sophists throughout the dialogues-- since they are not members of a polis in the full sense they are incapable of civic virtue. It is for this reason that they are unable to teach it. If this reading is correct, it also shines light on Socrates' refusal to go into exile at the end of his life. Were he to leave Athens, he would have, by definition, become a sophist.

This completes the initial negative description of Timaeus. He is suggested, tentatively, as one who has the lived experience necessary to adequately convey in words the matters about to be discussed as well as the required skill in the narrative art.

After the negative description, Socrates positively introduces Timaeus. We are told that he belongs to a well-governed polis, that he is well born and and possesses much wealth (*ousia*), and furthermore that he has held the highest offices in his city, received its highest honors, and that he has passed through the whole of philosophical learning.¹⁹ Later we are told by Critias that: “ he knows more about astronomy than the rest of us and has made knowledge of the nature of the universe his special study.”²⁰

This description is remarkable for a number of reasons. It clearly recalls the notion of the philosopher-statesman outlined in the *Republic*. This is particularly relevant considering the parallel between the *Republic* and the *Timaeus* that is set up in the opening.²¹ It further raises the question of to what degree are we to consider Timaeus as an example of a philosopher-king “in motion and actively exercising the powers promised in their [his] form”.²²

Even the choice of Locri as the home city for our narrator is meaningful. Locri is, as Taylor points out, legendary for its *eunomia*.²³ Pindar, in his tenth Olympian ode eulogizes the city as follows: “In that city of the Locrians in the West, dwelleth Justice;

19 *Ti.* 20 a 2-6.

20 *Ti.* 27a.

21 *Ti.* 17b-19b. There is an ongoing debate that will surely never be settled as to whether the conversation Socrates refers to is the same one that occurs in the *Republic*. However, this really does not matter. The point is that the *content* of the conversation echoes the *Republic* to Plato's audiences, ancient and modern.

and dear to her is Calliope, and Ares clad in bronze.²⁴ That is to say, the Locrians excel in poetry and warfare but most of all they are notable for the firmness of their traditional laws.²⁵ Again in the same poem he praises the Locrians as both wise and warlike.²⁶ There is no doubt much of the formulaic in Pindar's praise, but Plato is almost certainly referring back to these notions which have the Locrians as possessed of both heroic and intellectual virtue.

Further evidence for the deliberateness of this choice of home cities is shown when Plato again mentions Locri in the *Laws*. Here he has the Athenian Stranger state that the Locrians are reputed to have the best laws of any western state.²⁷ And again the extraordinary quality of the constitution of Locri is mentioned in Aristotle's *Politics* where we find that the lawgiver of the Locrians was Zaleucus, rumored to be a disciple of Thales, although Aristotle is skeptical regarding this last detail.²⁸ Zaleucus is a shadowy figure, a semi-mythical lawgiver who, according to a scholiast on Pindar, received the

22 219 b-c; This line refers to the state, but may just as easily apply to Timaeus himself. There is, of course, one important difference between Timaeus, and the philosopher kings of the *Republic*. The philosopher kings lived an ascetic, communal life, whereas Timaeus is described as wealthy. However, this wealth still functions as a sign of Timaeus' virtue. First, it shows that he has not squandered any wealth that he may have inherited by virtue of his aristocratic pedigree. Second, some level of material comfort is required for the development of virtue; poverty stunts one's moral development. The philosopher kings were taken care of by the polis as a whole, Socrates could take advantage of the favors of his wealthier friends, but neither of these options is open to Timaeus. Finally, there is a pun at work. The word "*ousia*," used to refer to Timaeus' wealth was traditionally used to signify hidden wealth. In context it may be read as referring to the wealth hidden from view within Timaeus' soul.

23 A. E. Taylor, *A Commentary on Plato's Timaeus* (Oxford: Clarendon 1928) 49.

24 Line 13. Trans. John Sandys.

25 Calliope is, of course, the muse of epic poetry and Ares is the god of war.

26 Line 15.

27 *Laws* 631b.

28 *Politics* 1274a 22-31.

laws in a dream from Athena herself while he was but a poor shepherd.²⁹ The code itself is reported to be a mixture of the codes of Crete, Sparta, and Athens.³⁰ This presumably indicates that they were fairly aristocratic in character, but with some democratic elements as well—a balanced constitution. The laws of Locri were renowned not only for their quality, but also for their inflexibility. A frequently repeated story has it that anyone who wished to either propose a new law or repeal an old one must make his case before the council with a noose around his neck; if the amendment failed to pass the would-be reformer met his death.³¹ Taylor maintains that the reference in Pindar to the wisdom of the Locrians is to be interpreted to mean that Locri was at that time under Pythagorean rule—that is, the rule of “the wise”. This is, however, a conjecture at best—one which does not appear to have any other support, and should thus be met with due skepticism.

The description of Timaeus would almost certainly have brought certain contemporary figures to the mind of the audience as well. It recalls, for example, Dion and Archytas, individuals that Plato is believed to have associated with. These men were living examples of a combined civic and philosophical life. Like Timaeus they hail from Magna Graeca, and are usually associated, socially, philosophically, or politically with Pythagorean elements. The details of Dion's life we know from *Letter VII*, and there we see the author lavish the highest praise upon him. Archytas was a peerless mathematician

29 Gertrude Smith, “Early Greek Codes” *Classical Philology*, 17.3 (1922) 187. The similarities to the opening of the *Theogony* are marked.

30 Ephorus, cited in Smith 192.

31 Smith 194.

who was furthermore elected to seven consecutive terms as the *strategos* of his home city, an achievement which required that an exception be made to the usual term limits.³²

There is also another notable factor in Socrates' praise of Timaeus. Praise from Socrates for others is far from rare, but often, this act of praise is tinged with irony and precedes a dramatic demonstration that the object of praise is not deserving of it.³³ The curious thing here is that no dialectical examination ensues. Socrates does not interrupt Timaeus, allowing him to say his piece, which strongly suggests that his praise may be genuine.³⁴ This is one of the most puzzling features of the *Timaeus*; it is certainly anomalous for Socrates to stand about mutely while someone else holds forth.

Finally, The way in which Timaeus is introduced in relation to the other characters is telling as well. Warman Welliver notes that there is a pattern of descending praise on the part of Socrates towards Timaeus, Critias, and Hermocrates, coordinated with a descending reliability of evidence.³⁵ Socrates directly expresses his high opinion of Timaeus, but when it comes to Critias we are given a much more tepid evaluation: "Critias... is well-known to all of us at Athens to be *no novice* in any of the subjects we are discussing".³⁶ The praise is much more ambiguous and the evidence takes the form of

32 As with so many of Plato's contemporaries we know little of Archytas' life or works. A thorough treatment of the sources used to construct our accounts of his life may be found in Carl Huffman's *Archytas of Tarentum*. (Cambridge: Cambridge UP 2005).

33 His seeming praise of Ion, of Euthydemus, of Dionysiodorus, and of Euthyphro are but a few examples of this.

34 The closest parallel within the dialogues would be Socrates' extended silence in the *Theaetetus*, *Sophist*, *Statesman* trilogy. But even there, Socrates has his say in the extended discussion of the *Theaetetus* beforehand.

35 Warman Welliver, *Character, Plot, and Thought in Plato's Timaeus-Critias* (Leiden: E. J. Brill 1977) 11.

36 *Ti.* 20a, emphasis added.

mere *endoxa*. Finally, we are told of Hermocrates: “that Hermocrates is fully qualified in all such matters by natural gifts and education, we may trust the reports of many witnesses.” Instead of any real statement of his knowledge or skill we are treated to a statement of hearsay. At each point in the dramatic prologue to the *Timaeus* Plato goes through a great deal of trouble to show us that Timaeus stands head and shoulders above the other interlocutors. Indeed he is portrayed as being more qualified than Socrates to deal with the questions at hand.

There is another explanation available for Socrates' silence. It could be argued that it is a simple consequence of the style of writing Plato employed at the time he wrote the *Timaeus*. This dialogue is said to belong to Plato's later period. These later dialogues, such as the *Timaeus*, the *Philebus*, and the *Sophist* are not really “dialogues” at all. Rather they are thinly disguised treatises, couched in a dialogical form only due to the habit of the author. This answer is unsatisfying for two reasons. First, some recent scholarship has given us reason to be careful in assuming that the chronology of the dialogues we habitually employ is correct.³⁷ It may well be that the *Timaeus* is not a later dialogue at all. Second, even some of the so-called later dialogues, namely the *Theaetetus* and the *Parmenides*, still display a robust dialogical structure and feature aporetic conclusions. Even if the standard chronology is true, Plato cannot be said to have abandoned dialogue. Further, even if he *had* grown tired of dialogues in his old age, it is not as if he couldn't have simply written treatises instead. It is not as if dialogue was the only option available to him, as the surviving fragments of the Ionic tradition and the

³⁷ Cooper summarizes some of the recent work, though skepticism about chronological readings goes back at least as far as Paul Shorey's work. John M. Cooper, introduction, *Plato: Complete Works*, ed. John M. Cooper (Indianapolis: Hackett 1977) xiii, xiv.

rich medical literature show us. Having ruled out competing explanations, it is best to conclude that having Socrates present but silent is a deliberate dramatic choice by Plato.

One possible objection to taking Socrates' praise too seriously is that the *Timaeus* is generally thought to be the first work in an unwritten trilogy. Timaeus' speech would presumably be followed by one from Critias and one from Hermocrates. This opens the possibility that the final structure of the trilogy would somewhat resemble that of the *Symposium*. Each character is given the opportunity to make a speech, saving Socrates' own critical speech for the very end. Since we do not possess the completed trilogy, this argument goes, we cannot say with any certainty that Socrates would not have eventually undermined Timaeus' credibility in his usual fashion, incorporating the insights of this speech within a broader framework. But the silence on Socrates' part seems to stand as an indication that his recounting of Timaeus' achievements is not intended ironically, and this is further supported by the matter of fact tone of Socrates' introduction. His description of Timaeus lacks the excesses of praise and ostentatious use of superlatives that mark his ironic praise of others.

However, even if Plato originally intended such a trilogy, we may ask ourselves why he never finished it. All we know is that for some reason he decided to allow the dialogue to stand as it was, and it is not unwarranted to suppose he may have simply felt that the dialogue was more than capable of standing on its own. But whether or not this was the case, we must work with the text as it comes down to us, and the form in which we have received it is that of a stand-alone work.³⁸ It is best to assume that the work we possess

³⁸ Warman Welliver presents an intriguing argument that the incompleteness of the *Timaeus* is intentional. See Welliver, especially chapter seven.

come to us exactly as Plato intended, rather than entertaining fantasies about a projected trilogy or tetralogy. In doing so we avoid bringing to the text any presumption of a failure or weakness on Plato's part.³⁹ It embodies sounder scholarship in that it does not employ questionable and unverifiable assumptions about Plato's intent.

Another possible reason for Socrates' silence concerns the subject matter of the discourse. Socrates' primary concern throughout the Platonic corpus is with the unified whole of the social, the political, and the ethical. The definitions that he tries to extract from his interlocutors are definitions of virtues, and the sort of knowledge he is after always has an ethical component. Timaeus' is charged with giving an account of the generation, composition, and operations of the cosmos. It is a task more in line with that of the Ionic *physiologoi* than with the interests of Socrates. This explanation is better than the previous two insofar as it remains internal to the text.

However, even though virtue does not appear to be Timaeus' primary concern, virtue still plays an important role in his cosmological narrative. Timaeus twice enters into discussions of questions concerning virtue and the political order, and although in each case he quickly disengages himself from the topic before doing so he makes several positive statements concerning the matter.

The first account of virtue occurs as part of the demiurge's charge to his creations.⁴⁰ In this scene the demiurge declares to the newly created souls of all worldly creatures the *nomoi* under which they will live. Each of these souls is equipped first with sensation,

³⁹ Or, worse yet, explaining features of the *Timaeus* and *Critias*, by means of Plato's supposed laziness, declining artistic powers, or encroaching senility. For the history of this unfortunate interpretive strategy associated primarily with Wilamowitz, see Welliver 1-7.

⁴⁰ *Ti.* 42 a-d.

then with *eros*, then with pleasure and pain, and finally the passions. From the interaction of these faculties come the passions. The life of righteousness is constituted by the effective regulation of these passions. The soul that is able to live such a life is rewarded with a rebirth in its native star. If, on the other hand the soul is not able to attain mastery of the passions, it is reborn as a woman and if failure to achieve mastery in this realm continues, will lead to being reborn as an animal.

This passage provides both a general definition of virtue and gives an account of the consequences of living or failing to live a virtuous life. However, a few things distinguish this account from the sort given by Socrates' more typical interlocutors. Timaeus' definition of virtue is not paradigmatic; he does not attempt to define virtue in terms of a particular act performed by a particular person, or even as an aggregate of such acts. Furthermore, he does not even give a definition of any *particular* virtue. Instead he starts with the genus of virtue, only then working his way down to the species. He has already grasped the form of explanation which so few of Socrates' interlocutors manage to master. Timaeus' is an hypothesis concerning virtue that expresses a unity of virtue, one that binds all the traditional virtues under one description. A second important feature of Timaeus's account of virtue is that it arises organically out of the account of the cosmos as he composes it. It is not as if he tries to shoehorn some preconceived notion of the virtuous life into an account that cannot accommodate it; rather, it is a systematic result of his notion of the cosmos as a whole which is, as it is in the myth of Er familiar from the *Republic*, a fundamentally just universe. Finally Timaeus' account of virtue does not constitute a claim to the possession or knowledge of virtue. The account of virtue given

by Timaeus is part of a larger discourse that is qualified as merely *eikōs*. It is merely an account of seeming.

Another argument against assuming that Timaeus' discourse is somehow un-Socratic is provided by A. E. Taylor who maintains on the basis of Socrates' autobiographical remarks in the *Phaedo* and his calculation of the dramatic date of the *Timaeus*, that the Socrates we encounter in the *Timaeus* is fairly young, a mere fifty or so, and that he has yet to abandon physical speculation for ethical concerns.⁴¹ Taylor sets the date as within a year of the dramatic date of Aristophanes' *The Clouds* and concludes on this basis that the Socrates we see here is closer to the Aristophanic metersophist. But even if we do not take Taylor's claims to be entirely accurate we still have the autobiographical material in the *Phaedo* to go on. This cannot be entirely discounted and may help to explain Socrates' patience with Timaeus' lengthy monologue, it makes his silence all the more problematic, however.

Timaeus and Pythagoreanism

Regarding the question of who Timaeus is, the first and obvious possible answer is that he represents an Italian strain of thought. The area of Magna Graeca gave birth to the Pythagorean philosophical tradition and the thought of Empedocles, among other philosophical movements. It is a tradition that embraces far-ranging and diverse speculation about the origin and nature of the universe, the soul, and the human body. This, at least by geographical association, gives Timaeus an impressive philosophical

⁴¹ Taylor dates the events of the *Timaeus* as no later than 421 b.c.e.. He gives 423 b.c.e. as the publication date of *The Clouds*. See Taylor 16, 17, 19, 20, 22.

pedigree, and it gives us insight into the sort of person that Plato's audience would expect Timaeus to be, but, unfortunately, it does not yet tell us much, giving us little more than we get with Plato's "stranger" characters.

Out of these strains of thought, Timaeus has been most frequently linked to Pythagoreanism by both ancient and modern commentators. Unfortunately, this tells us still less. In the wake of Walter Burkert's critique of the received knowledge concerning Pythagoreanism we now find that we have very little definite to say about the Pythagorean tradition prior to the Academy, and furthermore, that much of what we now believe about them is a product of a later, post-Platonic strain of Pythagoreanism which emanated from the early Academy and drew on the *Timaeus* as a central document. Thus to attempt to treat Timaeus as a Pythagorean is ultimately an interpretive dead-end that leads one either on the one hand to explain the obscure by means of the unknown or on the other hand to circularly interpret the dialogue in terms of a notion of Pythagoreanism which stems from the same dialogue.

2: *Aretē* and Physics

The relationship between *aretē* on the one hand and *sophia* and *epistēmē* on the other is a central and persistent theme in the writings of Plato. Indeed he often explores the various ways in which all the things encompassed in the term *aretē* might be a kind of knowledge. It is to be expected, then, that we would see this theme played out in the *Timaeus* as well. I argue that in this dialogue it is suggested that character virtue is a necessary precondition for one's being able to apprehend the normative structures which organize the visible cosmos. That is to say, that one must be good in order to be a good physicist.

In this chapter I lay out the evidence which supports this claim. This evidence is to be found both in the traditionally philosophical aspects of the dialogue, that is to say the words spoken by the characters, but also in the ways that the characters are described and presented within the fictional structure of the work. Further support for this view can be found by going outside the *Timaeus* itself, in dialogues which are dramatically and thematically linked to it, namely the *Republic* and the *Phaedo*. The *Republic*, as I have argued earlier, is the thematic precursor to the *Timaeus*, and thus we should expect that many of the same topics would be addressed in it. The close linkage of the subject matter of the *Timaeus* to the Socrates' autobiographical speech in the *Phaedo* is widely

recognized.⁴² In addition to these two works, further support can be found in the epistemological digression of the the *Seventh Letter*.

As I suggested in chapter one, Plato goes to great lengths to establish Timaeus as someone who has achieved excellence in both the philosophical and civic spheres.⁴³ Assuming that Socrates' appraisal of Timaeus' character should be regarded as accurate, we must ask ourselves what it means. He has been depicted as an accomplished statesman, and a highly honored citizen of a most well-governed city, as a member of an aristocratic family, and as a distinguished thinker. All of this is carefully crafted to make Timaeus seem like a most remarkable individual. However, it inevitably gives rise to the question of what, exactly, any of these traits have to do with the role he plays in the dialogue. They certainly provide us with assurances that the speech he gives will be one which ultimately ties to the stated subject of conversation, the best society. However, what remains mysterious is what connection there is, if any, between this exhaustive list of qualifications and his ability to perform the task delegated to him by Critias, that is, the minor matter of the formation of the cosmos and its history up to the emergence of human beings. After all, the connection between Timaeus' many admirable personality traits and his ability to theorize *peri phuseos* seems tenuous indeed. "Of what aid is coming from a well-governed state in the practice of astronomy?" is a question few commentators have even asked. Yet it is one which arises naturally in the mind of the reader of the *Timaeus* if the dramatic prologue is given more than cursory attention.

42 See, for example, Paul Friedlander, *Plato*, trans. Hans Meyerhoff, vol. 3 (Princeton: Princeton UP 1969) 360. Donald Zeyl, introduction, *Timaeus*, Donald Zeyl ed. and trans. (Indianapolis: Hackett 2000) 8.

43 For Plato, of course, politics and philosophy are inseparable, so this characterization is already inaccurate. The argument of this chapter serves to show one reason why this is the case.

This introduction does not give us a list of Timaeus' qualifications for various discrete tasks, it does not serve to show that he is a polymath who excels in both the political and the philosophical, rather all of these things show us that he is fit to perform the single task which is the description of the universe and the human beings that inhabit it. Since both are structured by *dikē* these are complimentary knowledges. Further, it is not merely that knowledge of things like justice enables individual virtue, political effectiveness and astronomical aptitude, rather proper upbringing and the possession of both intellectual and civic excellences of character place the soul in such a state that it is able to properly carry out the practice of the *phusikos*.

Within the works of Plato, knowledge and virtue are both difficult concepts to get a firm hold on. He never seems to settle on a final definition for either. This renders any attempts to nail down the relationship between the two doubly difficult. However it remains possible to identify broad commonalities between his various accounts of these concepts which may point us in the right direction.

Virtue and Knowledge: The Known

Plato's *Phaedo* is a work which, on a very literal level, is the last word on who Socrates was.⁴⁴ Part of this summing up of his person is found in an actual summary of his intellectual life, an autobiographical monologue found at 96a-100c which again proves fruitful. Here Socrates articulates a critique of Anaxagoras which he in turn uses

⁴⁴ Many scholars treat the *Apology* as best summing up Socrates' character. Nonetheless, the *Phaedo* is, when considered according to the dramatic chronology, *literally* the final word on Socrates. After he drinks the hemlock, there can be no more Socrates stories. As the depiction of the end of his life, it forms a kind of eulogy.

to define “his own confused method”⁴⁵ for understanding the causes which underly our experience. Socrates relates that when he was younger, he was attracted to inquiry into the workings of the natural world.⁴⁶ When Socrates first hears someone reading from a book of Anaxagoras he is delighted to discover that someone has proposed the intuitively correct idea that it is understanding (*nous*) which organizes (*diakosmōn*) and bears the responsibility⁴⁷ (*aitia*) for all things, arranging (*kosmein*) each existent as it is best (*beltista*) for it to be.⁴⁸ In summary, thought “cosmoses” the cosmos for the sake of the good.⁴⁹ The only sort of world which could be called rational is one where all that is, is because it is better for it to be that way, and the only adequate account of such a world is one which shows how this is the case. This account implies, as Panglossian as it may sound, that discovering the reason why anything is the way it is, is identical with discovering the best possible way it could be. Of course, any such ordering imposes constraints, it may seem that some given aspect of reality, such as disease or suffering is not for the best, so there must be limitations of some sort involved in a scheme like this, but the principle which structures the cosmos according to this view is ultimately

⁴⁵ *τρόπον αὐτος εἰκῆ φύρω*

⁴⁶ *Phaedo* 96a.

⁴⁷ *Aitia* is usually translated as “cause,” at least in scientific contexts, but it has an original meaning of moral or legal blame or responsibility. Translating it as “responsibility” wherever it is not too awkward brings out the degree to which the sort of causation Plato is talking about is a *normative* concept connected with notions of value rather than a merely descriptive concept. The earliest uses “*aitia*” are in moral contexts (Pindar, *Odes*, I.35). It is still used in this sense throughout the works of Plato. See, for example: *Apology* 38c, *Rep.* 565B, *Criti.* 52a, *Theat.* 150a, *Theat.* 169a, *Laws* 624a. (LSJ)

⁴⁸ *Phaedo* 97c. It is worth noting that the thinker with whom Socrates is confused by the public and the prosecution in the *Apology* is none other than Anaxagoras.

⁴⁹ Werner Jaeger notes that Plato is perhaps the first to use the word “*kosmos*” as a general synonym for goodness, whether in the individual, the society, or the universe as a whole. Werner Jaeger, *Paideia*, trans. Gilbert Highet, vol 2, (New York: Oxford UP 1986) 146.

axiological. If this hypothesis holds, then the highest, and indeed, only worthy subject of inquiry is the best itself.⁵⁰ This procedure contains the possibility of answering all of the questions which preoccupied Socrates in his youth. For example, to answer the question of whether the earth is at the center of the cosmos or not one merely needs to determine which of these two possibilities is the better.⁵¹

Socrates then uses this notion of a guiding *nous* to clarify exactly what sort of responsibility or causation is revealed by this method of inquiry. To use the slightly anachronistic terminology of Aristotle, “the best” and all of the causes most properly apprehended by human *nous* belong to the category of final rather than efficient causes. Plato appears to have been led to this conclusion by the association that the word “*nous*” has with purpose or intent. To the Greek mind, to have a *nous* involves, first and foremost the ability to act with purpose, secondly the ability to apprehend, and only derivatively the ability to think abstractly. Thought and understanding are tied with the accomplishment of definite tasks. Thus the task of a properly philosophical investigation of the nature of the physical world will involve, first and foremost, the investigation of the complex network of final causes lying behind the phenomena, a process which will ultimately lead the inquirer up to the “good common to all”.⁵² Socrates is, of course, ultimately disappointed when, after acquiring Anaxagoras' book, he finds that it offers no improvements on the clumsy efficient-causal explanations which prevailed in his day.

⁵⁰ *Phaedo* 97d.

⁵¹ *Phaedo* 97e.

⁵² τὸ κοινὸν πᾶσι ... ἀγαθόν; *Phaedo* 98b.

This portion of the *Phaedo* is of a significance disproportionate to its brevity. We find that Socrates' turn away from natural philosophy and towards ethical and political matters was not an abandonment of inquiry into the sensible world, but was—at least in part—an attempt to discover the principles that Socrates' Anaxagorean hypothesis require if it is to ground human attempts at understanding the ordering of the cosmos. Thus Socrates' early career and his more familiar quest for universal ethical definitions are two parts of the same inquiry. In the world of Plato's dialogues, ethics truly is first philosophy.

Timaeus' “likely story” about the origin and structure of the cosmos seems to come as an answer to Socrates' wish. For all of its flaws and seeming absurdities it embodies an explanation of the cosmos as structured by final causes and in terms of the “best”.

Timaeus states at nearly the outset of his discourse that his divine craftsman, being good, desires to make the world as good as it is possible to be.⁵³ This is no mere throwaway line, but serves as a guiding explanatory heuristic throughout his investigation. This is clearly evident in the section of his monologue where he describes the formation of the body of the universe.⁵⁴ According to this story the universal craftsman fashions the cosmos as a living and intelligent being because the living is better than the non-living and the intelligent is better than the non-intelligent. At each stage of his explanation Timaeus not only explains how the phenomenon under consideration proceeds, but why it occurs. For example, the process of vision is explained materially as the collision of two streams of fire—one emanating from the eye of the observer and the other from the object of vision. However, Timaeus does not stop there, he further offers an explanation

⁵³ *Ti.* 29e.

⁵⁴ *Ti.* 29d-34a.

in terms of why it is ultimately better to have vision than not. It allows us to study the orderly movements of the heavens, reproduce them in our souls, and thereby learn philosophy.⁵⁵ The occurrence of arguments like these lead Donald Zeyl to describe Timaeus' approach to physics as the answer to the question: "Given that the world as a whole is the best possible one within the constraints of becoming and of Necessity, what sorts of features should we expect the world to have?"⁵⁶

Turning back to the *Republic*, we see these same themes being worked out. Here the topic of the inquiry is different, but again, knowledge of the good is key. Though, of course, it comes as less of a surprise to modern readers that this would be at the center of a discussion of justice than one of cosmology. Though most of the *Republic* centers on the ethico-political, we see something like the quasi-Anaxagorean cosmology of the *Phaedo* discussed here, too, in the "true astronomy" described to Glaucon by Socrates in the *Republic*.⁵⁷ This is an astronomy which studies the intelligible structure of the cosmos rather than its imperfect visible correlate, it is a method that derives the way the world is from the way it should be. This further underscores how Timaeus is to be understood as the embodiment of certain ideas first given voice by Socrates.

Beyond this, it will be useful to take a brief look at the way the good in particular, and *archai* in general, are treated in the *Republic*. We need look no further than the justly famous sections describing the philosopher king and her studies. When it comes to the subject of the good, Plato is evasive, discussing it through analogy and metaphor. We are

⁵⁵ *Ti.* 47a-c.

⁵⁶ Zeyl 6.

⁵⁷ *Rep.* 529 c-d.

told that it is the greatest thing knowable (*mathēma*).⁵⁸ It is an *idea* and as such, defines a “what it is” (*ho estin*).⁵⁹ It is analogous to the sun. Just as the sun, while not identical with sight or the seen makes both possible, the good makes possible both *nous* and its objects (*nooumena*) while not being identical with either of them.⁶⁰ Thus it bears the ultimate responsibility for knowledge.⁶¹ Beyond even this, just as the sun is responsible for the growth and nurture of visible things, while not itself being the kind of thing that grows; the good bears the responsibility for the things that are without itself being one of them. It is, famously, *epekeina tēs ousias*.⁶² Thus, unlike all of the other things responsible for the “what it is” of things, it defies being thought of as a thing. This tortured and oddly Heideggerian description of the good is all that Plato was willing to commit to writing. The apocryphal reports that he said that the good was in fact the one, though tantalizing, are completely unhelpful and possibly misleading outside of whatever context these statements were originally made in.

All of this is well known, and as uncontroversial as anything concerning that most obscure concept of Plato's can be. Knowledge of the good is necessary to know the correct way to govern one's own soul, govern a polis, and further to understand the cosmos properly. It is a universal principle that structures all ordered systems—which is to say, anything which is a *kosmos*, in the classical sense.

58 *Rep.* 504e.

59 *Rep.* 505a, 507b.

60 *Rep.* 508c.

61 *Rep.* 508e.

62 *Rep.* 509b.

The good then is the most important thing one can know, not only for politics, but also for physics. Unfortunately, knowing it is not easy. The difficulty of apprehending it is indicated in Socrates' description of the career arc of the philosopher king. Even after selecting the best men and women, and subjecting them to a lifetime of rigorous physical, mental, and character training coupled with deep worldly experience, only a small number of them come to grasp the good, and only then at the advanced age of fifty.⁶³ There is probably some element of hyperbole to this description. After all, neither Plato nor Socrates as he describes him meets the stringent requirements to be a true philosopher king, neither having had the benefit of an upbringing in a perfect state, or having benefited from a perfect education, or having spent long terms in public service. Nonetheless, these passages serve to emphasize the difficulty of the task, and raise the question of what sort of person is even capable of knowing it.

Virtue and Knowledge: The Knower

The question remains: what sort of person is capable of knowing the good? One might suspect that one of the most pervasive notions in Greek thought, that only like can know like would play a role here. Returning to the *Phaedo* for a moment, we see this notion clearly articulated in the argument from kinship for the immortality of the *psuchē*. Here we find Socrates and his interlocutors exploring the consequences of the soul's ability to apprehend the simple and timeless objects of knowledge, and concluding that this must mean that it too must be simple and immutable.⁶⁴

⁶³ *Rep.* 540a.

⁶⁴ *Phaedo* 78b-80b.

The notion of kinship we find in the *Phaedo* is one which does not admit of degree. The soul simply is like its objects at a fundamental level. It leaves open the question of whether some may be more akin to these objects than others. For an exploration of this question we must turn to the *Republic*. The *Republic* is filled with passages which seem to support the idea that only the virtuous can know virtue, and, by extension, the good itself. One of the clearest statements of this is found in the discussion of the qualifications for serving as a juror in the *kallipolis*. Socrates dismisses the idea that the best judges are those who themselves have been wicked, that thieves know best how to catch thieves. Rather a good juror is one who has lived much of his life unacquainted with vice, and has instead cultivated virtue. A good juror has only made a study of the wicked late in life, when their character is set, and not in danger of becoming wicked through this exposure:

A vicious person would never know either himself or a virtuous one, whereas a naturally virtuous person, when educated, will in time acquire knowledge of both virtue and vice.⁶⁵

A wicked person, argues Socrates, will see wickedness in everyone, he will be unable to recognize a virtuous person, because virtue is not at home in his own soul, he lacks the kinship to the object necessary to apprehend it. A virtuous person, on the other hand, is capable of recognizing the vicious, for a vicious soul is merely a less complete version of a virtuous soul. Virtue here is a precondition for the recognition of virtue. This sort of knowledge through kinship is also addressed in the discussion of the nature of the

⁶⁵ *Rep.* 409d. Trans. G. M. A. Grube revised by C. D. C. Reeve.

philosopher-king at the opening of book six. For example, we find there the following discussion about the sort of person suited for the philosophical life:

Now, we'd certainly say that the unmusical and graceless element in a person's nature draws him to a lack of due measure. Of course. And do you think that truth is akin to that which lacks due measure, or that which is measured? Then, in addition to those other things, let us look for someone whose thought is by nature measured and graceful and is easily led to the form of each thing that is.⁶⁶

Again we see that being like the objects to be known is a necessity, in this case, one must have right proportion in one's soul in order to be able to recognize it in the world. If one lacks proportion, one is drawn to the disproportionate. That is to say, the sort of world one apprehends is conditioned by the state of one's soul.

The phenomenon Plato describes here is one which is rooted in our everyday experience of the world. This is illustrated in the following examples. When one is, for example, depressed the world appears in a very different way than when one is not suffering from depression. In depression everything in the world appears as drained of meaning and purpose. The world, so to speak, goes dead. The depressive cannot see any point in going to work, in paying their bills, even in eating a meal. They may indeed continue to engage in all of these activities, but it feels like a hollow experience of going through the motions. The depressive may intellectually understand that by continuing to go to work, pay their bills, and eat regular meals that they are maintaining their own life

⁶⁶ *Rep.* 486d. Trans. Glen R. Morrow. See also 487a, 494d, and 501d.

and contributing to society. They may further even profess religious beliefs, such as the idea that the universe as a whole was created with a purpose and that their own life has a unique and irreplaceable role in the divine plan. Yet, for the depressive, these ideas are merely dry and schematic beliefs. In their depression they are incapable of actually seeing the world in these terms, of actually becoming directly acquainted with this purpose and structure, hence they do not really *know* this structure. Understood in Platonic terms, depression ultimately is simply this state of being cut off from the structure of final causes which underlies experience. Likewise, when in a state of anxiety and fear, everything one experiences is constituted as a potential threat. The world shows up as an alien and hostile place that exists for the sole reason of antagonizing me. In this case, the teleological structure which is revealed is one which is radically off-base. For Plato, both of these states, as derangements of the passions, would count as forms of vice.⁶⁷

As for the reasons lying behind this need for a resemblance between the knower and the known, the references to proportion and harmony are telling. One cannot underestimate the hold that music and acoustics had on the Greek mind as explanatory models. Plato addresses in the *Phaedo* the prevalent idea that the *psuchē* may be an *harmonia* of the elements of the body, relating to it as the divine and immaterial musical capacity of a lyre does to its prosaic hide and shell substrate. Plato, of course, rejects this

⁶⁷ Indeed, depression (*dusthumia*) and cowardice (*deilia*) (a derangement of the passions closely akin to anxiety) are indeed listed as diseases of the *psuchē* towards the end of Timaeus' monologue. (86e-87b) They are here characterized as a condition which results from vapors arising from the decomposition of pent up phlegm and bile mixing with the motions of the *psuchē* and become blended together with them. This problem may be compounded by life under a bad form of government.

position, but only in order to be able to use the concept of *harmonia* to explain in turn both the health of the body and virtue within the soul. In addition to this, harmony is pressed into service in both the *Republic* and the *Timaeus* to explain the relationship of the divine planets to one another. Harmonics was, to the thinkers of Plato's generation, *the* cutting edge theory of physical science, a simple concept which could be used to unite diverse sensible phenomena. Taking this into consideration, we may think of the virtuous soul and the object of its knowing in terms of sympathetic vibration. Just as one vibrating string may inspire a kindred vibration in its neighbor, justice itself might *resonate* with a properly structured soul.

This necessary kinship of knower and known, which is only rarely explicit in the *Republic* plays a key role in the epistemology of the *Seventh Letter* and is dealt with there at some length. For example, as part of the author's explanation for why Dionysius could not possibly have the knowledge of *archai* that he claims to, we find the author stating:

[N]either quickness of learning nor a good memory can make a man see when his nature is not akin to the object, for this knowledge never takes root in an alien nature; so that no man who is not naturally inclined and akin to justice and all other forms of excellence, even though he may be quick at learning and remembering this and that and other things, nor any man who though akin to justice, is slow at learning and forgetful will ever attain the truth that is attainable about virtue. Nor about vice either. . .⁶⁸

To know the good one must have a natural kinship to it, and this kinship takes the form of a *kosmos*, an order and symmetry, within the soul of the knower. This order is virtue, both the intellectual virtues of a good memory and quick wit, but also the character virtues of justice and the rest.

All of this goes to show that Plato's conception of the nature of knowledge is even further removed from contemporary epistemology than is usually supposed. Knowledge is not, like Gorgias' knack for rhetoric, ethically indifferent, capable of being used for either good or evil depending on the inclinations of its possessor. Knowledge is no mere instrument, nor a matter of the passive representation of objects. True knowledge, knowledge worthy of the name, is something the pursuit of which transforms the pursuer. This is seen clearly in Socrates' characterization of philosophy as the root of all virtue in the *Phaedo*.⁶⁹ The employment of *nous* brings about a purification of the passions, freedom from fear, and true *sōphrosunē*. But the complement of this is also true; in order to even be able to come to possess true knowledge the would be knower must already be

⁶⁸ *Letter VII* 344a-b. Trans. Glen R. Morrow.

⁶⁹ *Phaedo* 61c-68b.

of a virtuous stock. That is to say, some sort of proto-virtue, an incomplete analogue which resembles the real thing must be present in order to come to know the real thing.⁷⁰ *Noesis* is the process whereby one who is already akin to the good cements and deepens this kinship.

Thus, in order to practice effective inquiry into the natural world, one must know that at which all things aim—the good. But knowing the good requires that one possesses the highest grade of character, which in turn requires that that the would-be physicist must be a product of a good society. Hence, only the virtuous are qualified to practice natural inquiry. One consequence of this view of the nature of natural inquiry is that it serves as a subtle indictment of all previous *phusikoi*. The flaws in the natural theories of Plato's predecessors and contemporaries can be understood as reflecting flaws in their characters.

This analysis shows us not only why Timaeus is introduced in the way that he is, but also shows us why the *Timaeus* could not be written as a straightforward treatise. To write a treatise would be to disembodify the voice of the speaker and thereby create the illusion of a voice from nowhere. For Plato, the account can only be as good as the one giving it, so we must be shown the person from whom it originates. One of Plato's continuing themes is that the speaker and all the peculiarities of her situation must be taken into account when evaluating their claim to truth. To write a treatise would cover this aspect up, create a false semblance of objectivity. This conception of truth was

⁷⁰ An idea like this seems to undergird the lover's ascent in the *Symposium* as well. In Diotima's ladder love of virtue necessarily precedes love of knowledge. (*Symp.* 209e-210e)

recognized by Nietzsche when he wrote of the Platonic conception of the true world, that it is “attainable for the wise, the devout, the virtuous—they live in it, they are it.”⁷¹

One consequence of this analysis is that it reveals a form of perspectivalism at work in Plato's thought, or if not a perspectivalism, a form of standpoint epistemology. The world one apprehends is a function of the state of one's soul. An ordered soul produces an ordered world, a beautiful soul a beautiful world. The difference between this view and a full-blown Protagorean relativism of the sort criticized in the *Theaetetus* is that there is a privileged position, that of the soul which exhibits health, that is to say, *aretē*.

From the analysis I have given so far, it may seem that I am attributing a vicious circularity to Plato's account of *epistēmē*. After all, if I am correct and Plato thinks that character virtue is a prerequisite to true knowledge, and if, as many argue, he is committed to the “Socratic” thesis that virtue is knowledge, then it appears that I am saying that he thinks that knowledge is necessary for knowledge.

This is only a vicious circularity if the sort of knowledge that is required is the same sort of knowledge that is supposed to result. Saying that knowledge is needed for knowledge is, when it comes down to it, the root of Meno's paradox of inquiry and, in a later era, the thesis of book I, chapter one of Aristotle's *Posterior Analytics*. Knowledge comes from prior knowledge.

Plato has Socrates, in both the *Meno* and the *Phaedo*, call the sort of knowledge that starts this process off *anamnēsis* or recollection, a process which is defined as finding knowledge within one's *psychē*. One sort of knowledge which falls under this description

⁷¹ Friedrich Nietzsche, *Twilight of the Idols*, trans. Richard Polt (Indianapolis: Hackett 1997) 23.

is knowledge of the structures of one's soul. The greater the degree of harmony and balance within the individual *psuchē*. The greater the ability one has to know these structures by acquaintance. This knowledge by acquaintance can then lead to propositional knowledge.

3: The Proem

In the previous chapters a case was made that Timaeus serves as a moral paradigm for the *phusikos*. He models the sort of upbringing and experience one needs to properly apprehend the world of *aisthesis*. The dramatic prologue serves to tell us about the character of Timaeus and by extension how we should take him. He is, unlike Critias and Hermogenes, someone for whom all indications are positive. He has been set up as a poet, a philosopher, an astronomer, and a statesman. Furthermore, he at least appears to possess the degree of character *aretē* to have the sort of knowledge necessary for the task at hand. In short—he appears as someone we, the audience ought to give our full attention to. This is, as of yet, only part of the story. The reader of the *Timaeus* has been shown the kind of soul adequate to the task, but has not yet been shown how the soul ought be employed. We have not yet been shown the manner of *activity* appropriate to the *phusikos*.

Taking this into account we may pass on to consider one of the most crucial passages in the *Timaeus*, the proem. In this short segment, beginning at 27c where Timaeus takes over from Critias and ending with Socrates' first and final (approving) interruption of Timaeus' discourse at 29d, Timaeus explicitly tells the audience the topic of his discourse, what he holds its status to be, and lays down the rules he will follow as well as specifying the interpretive rules we ought to follow if we are to understand him correctly.

The proem begins with an invocation which serves to demonstrate the proper attitude or mood (in the Heideggerian sense of *stimmung*) which should be taken by the *phusikos*. The invocation shows that an attitude of open, humble reverence is necessary for an undistorted apprehension of the ordering of the visible cosmos. The methodological portions of the proem serve to show us how to deploy our faculty of *logos* towards this end. We must unfold the meaning of sensory experience in speech, interpreting our experience in the light of ultimate ends and thereby come to model the cosmos within ourselves by becoming like it. Knowledge of the cosmos does not come through correspondence of the propositions one utters with states of affairs, rather it consists in a correspondence of the whole person with the cosmos. This conception of inquiry will later pay moral dividends, forming the basis of Timaeus' account of *paideia*.

Since Timaeus characterizes the mode of inquiry appropriate to the *phusikos* as an *eikōs logos*, as a discourse which deals in images and likelihoods, the question naturally arises of how literally we are to take his story, and this too must be addressed.

The Preliminary Invocation (27c - d)

Socrates gives the stage to Timaeus with the following words: “So Timaeus, it seems it is your job to speak next, when you have invoked the gods in accord with custom (*nomon*).”⁷² Timaeus puts Socrates' suggestion into practice by offering the following invocation:

⁷² *Ti.* 27b. ω *Τίμαιε*, τὸ μετὰ τουτο, ὡς ἔοικεν, εἶη καλέσαντα κατὰ νόμον θεοῦς. Translation is mine.

Surely anyone with any sense (*sōphrosunēs*) at all will always call upon a god before setting out on any venture, whatever its importance. In our case, we are about to make speeches about the universe (*pantos*)--whether it had an origin or even if it does not—and so, if we're not to go completely astray we have no choice but to call upon the gods and goddesses, and pray that they above all will approve of all we have had to say, and that in consequence we will too. Let this be our appeal to the gods; to ourselves we must appeal to make sure that you learn as easily as possible, and that I instruct you in the subject matter before us in the way that best conveys my intent.⁷³

Timaeus accomplishes much here. By starting with an invocation Timaeus affirms his link to the poetic tradition. A particularly relevant parallel is to the opening of Hesiod's *theogony*, Beginning as it does with Hesiod's own invocation of the Heliconian muses and various Olympic deities. A preliminary invocation is not a feature of the *theogony* alone, but this work is the template of all later *peri phuseōs* literature, and thus is the text which would be foremost in the minds of Plato's audience. By consciously drawing this parallel Plato indicates that Timaeus too is about to give us a theogony, a text which tells us of the origin of the cosmos, of the genealogy of the gods, and finally, in terms of these, describes the place and role of humans in the world.

Furthermore by having him start with an an invocation Plato demonstrates Timaeus' idea of the proper order of philosophizing. The account he is about to offer us is one that starts with the divine and works its way downwards to the things of the world. This again

⁷³ *Ti.* 27c – d

sends the reader back to the *Republic*. The dialectic as it is described in book seven of the *Republic* consists of two phases.⁷⁴ One phase is the upward-leading quest for *archai* in which indemonstrable first principles are grasped through a synthetic process. The second is the downward-leading reinterpretation of particular facts in light of these *archai*. Timaeus' overall plan tells us which half of the dialectic is being portrayed here, he is beginning with a set of *archai* already implicitly assumed which form the basis of his account.

This is supported by Timaeus' later assertion at 48c that it is not part of his task to broach the nature of *archai*. These highest principles are not something that he has the time to elucidate, and his mode of inquiry is not suited to discovering them, rather, he follows the method of hypothesis as it is described in the *Meno* and the *Phaedo*. He has already assumed a set of *archai*, and proceeds to account for the cosmos in terms of them.

With this introductory invocation Timaeus effectively distances himself from Critias' fable of Atlantis. Critias tries to forge a pedigree for his narrative by offering a most-probably fabricated genealogy that stretches back to Solon. Even assuming that Critias sincerely believes in the tale he tells and the origin story he offers, he still ends up appearing as one who places his faith in the oral-poetic tradition. He blindly trusts in the authority of a second-hand story of "Solon's." Timaeus on the other hand does not invoke the authority of any predecessors, he does not claim to have heard his cosmology from any ancient source Egyptian or otherwise.⁷⁵ Rather he places his faith firmly in the divine and tentatively in the power of humans to apprehend the world in logos, through

⁷⁴ The textual reference to the contents of the *Republic* provided in the prologue allows us to assume that the audience would be expected to hold at least some of the contents of this work in their minds, see ch 1.

dialectic. Of course, considering the timeless and eternal nature of the ultimate objects of dialectic these ultimately amount to the same thing.

Timaeus also tells us the subject of his discourse without yet revealing his precise position. He tells us that the most important topic in the grand monologue to follow will be that of the origin of the cosmos, if it had one at all, and the manner in which this occurred if it did. He further gives us an allegory of the method he will use to answer these questions. It tells us that the question he poses must be answered in accord with knowledge of the divine. In the invocation however the only thing mentioned is the generation of the cosmos. This is the question that most requires divine aid and is most closely linked with the gods. This tells us that while the origin of the cosmos is a question to be treated with the utmost care, solemnity, and piety. It is this question which by allowing the exploration of the order of the world and the way in which it arose that gives rise to the more particular questions of how to rightly organize smaller regions of the world—the human soul and the societies which form and are formed by it.

Further the relationship Timaeus' discourse is to have with the divine is delimited. He states that it is to be approved of by or be in accord with them.⁷⁶ This is followed by his self-exhortation. This choice of wording is anything but casual. Timaeus does not claim as Hesiod does to be filled with the gods or to speak their words. He positions himself as

⁷⁵ This is not to say that Critias' narrative of ancient Athens is worthless—merely that Timaeus' speech is a closer image of the truth. Critias' Atlantis narrative, though it does supply a vivid image of what a health society might be like, is ultimately a failure. This failure results from the fact that he is not guided in advance by a firm conception of the cosmos and the soul. Without these conceptions in place, it is impossible to discover anything through the use of an historical myth. In his eagerness to speak first, Critias denies himself the benefit of such a guiding conception. Timaeus, then, as the good mythmaker stands opposed to Critias, the poor mythmaker.

⁷⁶ *Ἐπομένως*

the artificer of his own *logos* which he offers up to the divine in the hopes that they might find it pleasing. In making this statement Timaeus shows us, even at this early stage, that his discourse is not to be taken as absolute truth, rather it at best it is something that the keepers of truth might approve of in a distant kind of way. His words cannot convey the contents of their immortal souls but merely of his mortal soul.

Finally we come to one of the most curious features of his invocation, namely its strangely sketchy or skeletal nature. It appears to be the promise of an invocation with no actual invocation following it. James Arieti picks up on this feature and claims that what Timaeus offers us is not an invocation at all, it is a parody of one, alerting us to the parodic character of the dialogue as a whole.⁷⁷ However, we need not draw such an extreme conclusion from this. The passage may instead be seen as serving two functions. It both tells the audiences something of Timaeus' character while at the same time building suspense. It shows us that Timaeus is pious, that the divine is first in his mind and first in the order of his philosophizing. This is the case not merely with the invocation but is shown again and again throughout the discourse that follows his explanations of the phenomena of nature begin and end with the divine.

However, while underscoring Timaeus' virtue this simple invocation also leaves open the question of which gods Timaeus is really invoking. Are his words addressed to the traditional gods as described in Homer and Hesiod, the objects of veneration in the

⁷⁷ Arieti, James, *Interpreting Plato: The Dialogues as Drama*, (Savage: Rowman & Littlefield 1991) 21.

Indeed, Arieti's attempt to treat the dialogue as primarily parodic is problematic. Though the *Timaeus* certainly contains moments of humor, perhaps the most notable and jarring of which is Timaeus' description of the cosmos as an animal consuming its own excrement, much of the *Timaeus* is quite humorless. If we treat the whole dialogue as a joke, it ends up being the longest, most tiresome, and least funny joke in the history of philosophy.

official cults? Or is he speaking to the strange “new gods” that philosophers are reputed to invent and that Socrates himself is later accused and convicted of introducing? The answer appears to be the latter, but it is only revealed as his monologue unfolds. Timaeus is canny and tactful, he never directly denies the existence of the traditional gods, the gods of Critias. Rather he maintains a wry and faintly sarcastic support for their existence.⁷⁸

We should accept on faith the assertions of those figures of the past who claimed to be the offspring of gods. They must surely have been well informed about their own ancestors. So we cannot avoid believing the children of gods, even though their accounts lack plausible or compelling proofs.⁷⁹

It is hard to miss the sarcasm in passages like this, including as it does a straightforward affirmation of circular argument. However, the divinities that he unquestionably supports the existence of and calls to presence with his words are not of the family of Zeus. Instead they are the paradigm, the demiurge, the world-soul, the star gods, and the visible universe itself. It is safe to assume that it is these entities that he seeks to please with his discourse rather than the old shopworn idols of tradition. Since to call directly on entities that have not yet had their natures illuminated by discourse or even described to the present audience would violate good sense and to exile the traditional gods from an invocation of this sort would smack of impiety we can see the sly wisdom of Timaeus' laconic prayer.

⁷⁸ See *Ti.* 40d-41a.

⁷⁹ *Ti.* 40d-e.

However, Timaeus is not one to shirk his duties to the gods, even if they are gods that he has just invented, the true and full invocation comes not at the beginning of his speech but, as it must, at the end, just as he is about to yield the floor to Critias again:

Now I offer my prayer to that god who had existed long before in reality but has now been created in my words. My prayer is that he grant the preservation of all that has been spoken of properly; but that he will impose the proper penalty if we have, despite our best intentions, spoken any discordant note. For the musician who strikes the wrong note the proper penalty is to bring him back into harmony. To assure, then, that in the future we will speak as we should concerning the origin of the gods we pray that he will grant the best and most perfect remedy-- understanding.⁸⁰

The god to whom he here directs his prayers is none other than the cosmos itself, the intelligent living being which encompasses all living beings within it as components. This god has now, in an important sense, been brought into being by Timaeus' description of it. By articulating this being in language, it has become available to humans as an object of contemplation, something which can be modeled in their own souls.

The Laying out of Principles

After Timaeus gives his invocation, he moves to establish a few general principles that structure the account he gives in the monologue. The first of these involves a distinction which cuts through both the ways in that things may be said to exist, and the

⁸⁰ Criti. 106b. trans. Diskin Clay.

ways in which things may be thought or spoken about. There are, first off, things that simply *are* and always are as they are. There are, on the other hand, things that are always becoming other than themselves, and thus, never *are* in the strict sense. The things that *are* may be grasped through the human capacities of *nous* and *logos*.⁸¹ The things which become are grasped in the different capacities of *doxa* (things as they appear to us, without justification or analysis) and *alogos aisthēsis* (the ordinary, unreflective view of the world):⁸²

81 Archer-Hind reads this passage as describing two capacities and two activities correlated to these capacities. *Logos* is the activity of *nous* and *doxa* is the activity of *aisthēsis*. This interpretation has the advantage of economy, and it makes sense of the fact that there is a marked similarity between each pair of concepts. However, there is nothing explicit in this passage that licenses this particular connection. We could just as easily treat each of the pairs as being descriptions of single faculties. R. D. Archer-Hind, *The Timaeus of Plato* (London: MacMillan 1888) 86.

82 Most commentators translate this latter term as “unreasoning sense perception,” or some similar phrase. The implication, if it is translated in this fashion, is that there is no reason to be found in the sensible world, and that true knowledge is only to be found in turning away from the senses. This interpretation can be supported by the descriptions found throughout the *Republic* of philosophy as the turning upwards of the eye of the soul. However, this conception of philosophical knowledge is not consistent with the conception we find in the *Timaeus*. At 47 a-b Timaeus tells us that the concepts employed by philosophy, including even number, derive from the regularities in the world revealed to us by our sense of sight. The conception of philosophy given to us in the *Timaeus* is thus broadly, though not crudely, empirical. Given this, it is best to consider this passage as speaking about sensations which have not been reasoned about, rather than as denigrating all sense perception as senseless. This again is consistent with the Socrates of the *Phaedo*, who makes *aisthesis* the precondition for recollection and hence knowledge at 74d-76a.

As I see it then, we must begin by making the following distinction: What is *that which always is* but has no becoming, and what is *that which becomes* but never is? The former is grasped by understanding (*nous*), which involves speech (*logos*). It is unchanging. The latter is grasped by *doxa* involving unanalyzed experience. It comes to be, and passes away, but never really is.⁸³

The unstated guiding principle of this section is that the structure of the cosmos and the structure of the human psyche naturally correspond to one another—something which becomes a recurring theme throughout the *Timaeus*. Each way in which the psyche comes to understand the world is geared to a corresponding aspect of the world. Humans have the ability to see the world not merely through their animal perceptions, but also as fully unfolded through language and thought. We articulate our experience in the structures of reasoned language. This mode of apprehension brings out the unvarying and stable aspects of our experience, those things which *are*, regardless of circumstance.

It is necessary to explore what is meant by *logos* here. It is a commonplace that the word is one of the most notoriously polysemous terms in the ancient Greek language. It can mean, as it is so often translated, “reason,” but it can also mean “word,” “language,” “meaning,” “value,” “reckoning,” “ratio,” “account,” “explanation,” “argument,” “rule,” “speech,” “story” and many other things besides.⁸⁴ This one word refers to both the process of abstract discursive reasoning and the ancient myths which we are prone to

83 *Ti.* 27d—28a The translation has been modified; the original text follows: ἔστιν οὖν δὴ κατ’ ἐμὴν δόξαν πρῶτον διαιρετέον τάδε: τί τὸ ὄν αἰεί, γένεσιν δὲ οὐκ ἔχον, καὶ τί τὸ γιγνόμενον μὲν αἰεί, ὄν δὲ οὐδέποτε; τὸ μὲν δὴ νοήσει μετὰ λόγου περιληπτόν, αἰεί κατὰ ταῦτα ὄν, τὸ δ’ αὖ δόξῃ μετ’ αἰσθήσεως ἀλόγου δοξαστόν, γιγνόμενον καὶ ἀπολλύμενον, ὄντως δὲ οὐδέποτε ὄν.

84 H. G. Liddell, R. Scott, Henry Stuart Jones, Roderick McKenzie, *A Greek-English Lexicon With a Revised Supplement* (New York: Oxford UP 1996) 1057-1059.

consider its opposite. If we are to have any hope of coming to understand the monologue as a whole, we must determine which of these meanings are operative in the discourse of Timaeus. In answering this question, it is helpful to look at those things Plato has Timaeus exhibit in his conduct. Timaeus is skilled in *logos* in the sense that he is both explicitly stated to be skilled in the exact sciences, and he is shown to be quite comfortable in such abstruse mathematical discussions as the creation of the world-soul—a mathematical argument that is so difficult to follow that it gives commentators problems to this day. However, in addition to this, Timaeus is shown to embed his philosophical and mathematical arguments within the encompassing structure of a mythic narrative. Going by the example set by Timaeus, it seems that *logos* in this sense is operative in his conception as well. Finally—Timaeus is depicted as relating his discoveries in the form of an oration, so the sense of “speech” is active as well. The activity of *logos*, then, is not limited to the abstract, scientific discourses beloved of Plato, such as geometry. If we are to find any common thread in these three uses, it is that each involves the relation of parts into a meaningful whole, they are all synthetic activities which, each in its own way, is used to make meaning out of the bare, senseless given of daily experience, or, rather, it unfolds what is implicit in this given.

In contrast to the stable view of the world given us by *nous* and *logos*, we can also approach the world through unreflective experience, we may take it as it immediately seems to us. This approach reveals a world that is in constant flux, where no stable qualities may be assigned to anything.

Timaeus was charged by Critias with describing the Cosmos as a whole, and his account must naturally do justice to both of these modes of apprehending what is. He must account for both the stable and changing features of the ordered set of sensible phenomena that constitute it. What is needed is a way of explaining changing things in terms of unchanging structures. He must take unreasoning *aisthēsis* and transform it into reasoned *aisthēsis*. So the next question which must be provisionally answered is how we can come to explain becoming in an intelligible fashion: “Now everything that comes to be must of necessity come to be by the agency of some cause, for it is impossible for anything come to be without a cause.”⁸⁵

When examining this passage it is worth remembering that the Greek concept of a cause, *aitia*, is one which originates in moral discourse. For something to be an *aitia* of something else is for this thing to bear the *responsibility* or take the *blame* for the existence of the other thing. The statement then is that for any act of creation, for any act of change, there is an actor. When viewed in this light we can see why Timaeus would come to answer the question of why there is a cosmos at all using the language of agency. It may be that no such creative agent exists, but hypothesizing such an agent forms a way of coming to grips with the processes that result in the existence of an ordered universe.

Timaeus' attempt to come to grips with the causes of the visible universe using the language of agency is seen more clearly in the next passage:

85 *Ti.* 28a.

So whenever the craftsman (*dēmiourgos*) of anything looks at what is always changeless and using a thing of that kind as his model (*paradeigmati*) reproduces its form and powers (*dunamin*), then, of necessity, all that he so completes is beautiful. But if he were to look towards a thing that has come to be, and use as his model something that has been begotten, this work will lack beauty.⁸⁶

At this point it is fairly clear what is going on. Timaeus presents an argument for the cosmos being formed in accord with a timeless and unchanging model—that is to say a model articulated in terms of *logos* rather than *doxa*. In order to make this point, he uses the example of a hypothetical craftsman, pointing out that craftsmen, of the more mundane sort, do a better job when they use a precisely defined, ideal model for their work than when they base their work upon existing products. This is a fairly common sense and uncontroversial point. Even today builders work from mathematically precise blueprints rather than haphazardly trying to copy existing houses using sight alone as their gage. This, however, only applies to things that can be said in some way to be produced, created, or generated, for something which is not a result of a shaping process will not be made to the measure of a pattern.

Whereas Timaeus introduces the notion of the craftsman as a means of illuminating the nature of processes of generation, the concept of a divine craftsman becomes more an more central to Timaeus' account, tempting the reader to take it quite literally. At 28c – 29a he seems to presume the existence of just such a craftsman when he asks “which

⁸⁶ *Ti.* 28a – b. The translation had been altered, Zeyl had “characteristics” for *δύναμιν* rather than “powers.”

model did the maker used when he fashioned it [the cosmos]?” By the time he has begun the monologue proper, this craftsman has become a fully fledged character to whom desires and virtues may be attributed. The question which naturally comes to mind is how literally are we supposed to take this notion of a cosmic craftsman? And if we are to take him as a metaphor, what is he a metaphor for? Within the dialogue, *Timaeus*, at times, seems to take this notion fairly seriously. However, there is a tradition of considering him to be an allegory of some kind. Interpreters in this school include Archer-Hind, and John Dillon.⁸⁷ Both of these consider the demiurge to be a metaphorical expression of the world-soul in its creative aspect and the paradigm to be the ideas within its mind. This reading is not without merit, as it brings an elegant parsimony to the complex and multi layered cosmology of the *Timaeus*. However, it leaves the interpreter in the embarrassing position of having to explain the elaborate passage in which the demiurge *creates* the world-soul. It takes quite a lot of mental acrobatics to make this scenario work, and one runs the danger of turning the world soul into a strange self-modifying, ever evolving, Hegelian world-spirit. This is indeed the solution pursued by Archer-Hind, which results in him writing things like the following:

In the *Timaeus* then the universe is conceived of as the self-evolution of absolute thought. . . . All that exists is the self-moved differentiation of the one absolute thought, which is the same as the Idea of the Good.⁸⁸

This is a formulation of “the central doctrine of the *Timaeus*” that obviously owes far

⁸⁷ For Dillon see his “The *Timaeus* in the Old Academy” in *Plato's Timaeus as Cultural Icon* ed. Gretchen Reydam-Schils 80-94. For Archer-Hind see his *The Timaeus of Plato*.

⁸⁸ Archer-Hind 28.

more to English absolute idealism than it does to the ancient world.

Considering the demiurge to be a metaphorical figure does have some textual support. Most significant is a passage from the proem where Timaeus informs us that “to find the maker and father of all that is, is a hard task, and having found him, it would be impossible to declare him to all.”⁸⁹ Here the audience is quite explicitly informed that whatever is really responsible for the order we find in the sensible world, whatever it is that corresponds to Timaeus' cosmic craftsman, is something that cannot be declared to all, which is to say, it is something that cannot be effectively described in the brief scope of the *Timaeus* and something that cannot be described in a work of writing intended for public circulation, which again testifies that the ideas expressed in the *Seventh Letter* lurk behind the cosmology of the *Timaeus*.

So, given that the metaphorical reading of the demiurge is best and that it is also best not to understand him as identical with the world-soul, the prudent course of action is one which makes as few assumptions as possible, while talking Timaeus' anthropomorphism with a grain of salt. If we read the *Timaeus* in this way, what we draw out of the account in the proem is that any process of ordering will involve an ordered (in this case, the whole of the world of *aisthesis*), an order (the paradigm) and an ordering individual, principle, or agent (the demiurge), or, to use a later terminology, a material, a formal, and an efficient cause. All that we can say about this figure is that he represents whatever it is that is responsible for the the activity that structures the world, and that he is personified so as to better allow him to function as a character in a mythical narrative. To

89 *Ti.* 28c.

say more than this, to assert that the demiurge is or is not an actual personality, is to ignore that we are explicitly told that this question will not be answered.

This leads to the next passage, in which things become more complicated:

Now as to the whole universe (*ouranos*) or world order (*kosmos*)—let's just call it by whatever name is most acceptable in a given context—there is a question we need to consider first. This is the sort of question one should begin with in inquiring into any subject. Has it always existed? Was there no origin (*archē*) from which it came to be? Or did it come to be and take its start from some some origin?⁹⁰

Here the ambiguities begin to pile up. In addition to the ambiguous figure of the demiurge, we now have a question of what is meant by *archē* in this passage, and what is the precise sense of “coming to be?” This leads to the question of whether we are to read what follows as indicating that the cosmos had a literal beginning in time or not.

The question of whether Timaeus' account of the generation of the cosmos should be taken as describing a literal creation in time or instead be treated as an allegory is one which dates back to the earliest phase of Platonic interpretation and continues until the present day. The question has not been settled and likely never will be; like so many issues in ancient scholarship any answer given will inevitably remain underdetermined by the available evidence. Nevertheless the question remains both compelling in itself and vital for determining the meaning of one of Plato's most enigmatic works.

90 *Ti.* 28b.

In contrast to many other similarly muddy questions which modern Platonic scholars face, the antiquity of this question makes it stand out as unique. The earliest commentators on this subject are none other than Aristotle, Speusippus, and Xenocrates.⁹¹ All of these are presumed, with good reason, to have been directly acquainted with Plato, his work, and his teachings. If Plato explained his own dialogues in the Academy, they of all people would have been privy to his explanations; if Plato truly professed unwritten doctrines, each would have been familiar with them. Aristotle is justly counted as Plato's greatest pupil, Speusippus was his nephew and, as the second scholarch of the Academy is the literal heir to his philosophical legacy. Xenocrates was a leading pupil at the Academy, as may be inferred both from his ascendancy to scholarch following Speusippus and from his possible role in founding, along with Aristotle, a philosophical school at Assos in Asia Minor.⁹² Yet these three come to very different conclusions. Aristotle presumes that Plato gives, through *Timaeus*, an account of the cosmos as something that has a literal beginning in time, whereas Speusippus and Xenocrates tell us that Plato held the cosmos to be eternal and ungenerated. They read the *Timaeus'* talk of the construction of the cosmos as merely an illustration of its ontological structure. What this tells us is that the answer to this question, unlike some others, would not be apparent to Plato's immediate audience, even those closest to him.⁹³

91 We know Aristotle's position through his surviving works, and the positions of the others through fragments of Crantor's commentary on the *Timaeus*.

92 Werner Jaeger, *Aristotle: The Fundamentals of the History of his Development*, trans. Richard Robinson, 2nd ed. (London: Oxford UP 1948) 111.

93 Dillon 80-90.

Throughout antiquity the interpretation of the *Timaeus* creation narrative as figurative seems to have been prevalent both in the Academy and in the later Neoplatonic tradition. There were however occasional notable dissenters such as Plutarch.⁹⁴ More recently the literalist position has been defended by Vlastos and Guthrie while the metaphorical interpretation has been upheld by Tarán, Taylor, and Cornford.⁹⁵

The Case for a Literal Interpretation

In many ways the argument for a literal interpretation of Timaeus' monologue is an easy one to make. The one making it need merely point to *Timaeus* 28 b-c:

It has come to be; for it is both visible and tangible and it has a body—and all things of that kind are perceptible. And as we have shown, perceptible things are grasped by opinion, which involves sense-perception. As such, they are things that come to be, things that are begotten.⁹⁶

This passage appears fairly unambiguous not only in the English translation, but also in the Greek original. As Guthrie notes the answer “It has come to be” appears as a statement in the perfect tense, indicating a completed action in past time.⁹⁷ The advocate of literalism may also point out that the creator of the universe is referred to as a “maker” and “father” in the passage which immediately follows, words which clearly suggest that the creator is responsible for a single event in the past. Had Plato wished to have Timaeus

94 Taylor 68.

95 Guthrie. 302 fn 2.

96 Emphasis mine.

97 Guthrie 304.

convey a different relationship of Demiurge to cosmos alternate terms such as “preserver” or “sustainer” might have been better used.⁹⁸ Plato, after all, was not a mediocre stylist and did not lack a rich vocabulary. It is safe to assume that his words are carefully chosen.

The very location of this statement is also held to be telling. It occurs within the *Timaeus'* proem which, is often taken to play the role of an explicit declaration of the principles which undergird the rest of his monologue. Proclus goes so far as to liken the principles introduced in the proem to the definitions, axioms, and hypotheses used by geometers; the rest of his discourse is held to flow necessarily from these.⁹⁹ The literalist may also point out that since Timaeus only characterizes his discourse as merely an *eikōs muthos*, a “likely story” after he apparently asserts the creation of the universe in time the latter statement may be construed as avoiding the uncertainty implicit in the former characterization.

The Case Against Literalism

All of this seems so straight-forward that there would hardly be any controversy at all were it not for the ensuing discussion of the nature of time, found at 37c-38d. Here Timaeus tells us that time as such, did not exist prior to the current world-order. Time, rather, is co-existent with the universe:

⁹⁸ Rather, I should say, their Greek equivalents.

⁹⁹ Cited in David Runia “The Literary and Philosophical status of Timaeus' *Proemium*” 108, *Interpreting the Timaeus-Critias: Proceedings of the IV Symposium Platonicum*, ed. Calvo and Brisson. (Sankt Augustin: Academia Verlag 1997) 101-117.

Time, then, came in to being together with the Heaven, so that just as they were begotten together, they might also be undone together, should there ever be an undoing of them.¹⁰⁰

As this applies to time as a whole, it also applies to the so-called “parts of time”, that is to say, the relational categories of “before” and “after”.¹⁰¹ This is so because Timaeus, in a characteristically Greek way, identifies time with the regular, measurable cycles of the celestial bodies. The absolutely regular alternation of day and night does not merely mark the passage of time, it *constitutes* time in some fundamental way. It is only through these visible manifestations of mathematical regularity that we can bring the chaotic flux of motions and change that marks our sensory experience into any sort of intelligible order.¹⁰²

If we take this passage seriously it poses problems for the simple account of the generation of the universe found in the proem. This account may be summarized as follows: The Demiurge first encounters a disordered visible sphere; he then orders this chaos in accord with the eternal paradigm, the result of this process is the cosmos. When this account is modified to take Timaeus’ theory of time into consideration, it makes considerably less sense. The pre-existent chaos cannot be said to exist “before” the cosmos in a strictly temporal sense. In fact, nothing can be meaningfully said to exist “before” or for that matter “after” the cosmos. This seems to render the entire creation

100 *Ti.* 38b.

101 *Ti.* 37e.

102 If my interpretation of this passage is correct, then the theory of time given here is the inverse of Aristotle’s. Rather than it being the case that there must exist soul in order for time to exist, it is the case that there must be time for *nous* to exist.

narrative as either a rejected possibility or as a metaphorical device that serves to illustrate relevant features of the cosmos, an analysis disguised as a narrative.

On the strength of this tension alone, A. E. Taylor declares that: “No sane man could be meant to be understood literally in maintaining at once that time and the world began together and also that there was a state of things which he proceeds to describe, *before* there was any world.”¹⁰³

Within Plato's dramatic structure, even the character of Timaeus seems to realize that his description of the origin of time is obscure and problematic, for he quickly resorts to the evasive tactic of putting off further discussion of it until a later time that, conveniently, never arrives.¹⁰⁴ However, anyone who had paid close attention to the poem might have expected this. After all, Timaeus explicitly tells us that his discourse will not be and cannot be entirely consistent with itself.¹⁰⁵ Commentators who attempt to extract an entirely coherent set of doctrines from the *Timaeus* are doomed to failure by the author's own admission. That said, we should try to determine what the overall thrust of the monologue is concerning this question.

The advocates of a metaphorical interpretation flesh their reading out through the use of two ambiguities-- one in the meaning of “becoming” and another in the meaning of “construction”. There is very little variation in the explanations given from Proclus down to Cornford.¹⁰⁶

103 Taylor 69.

104 *Ti.* 38b.

105 *Ti.* 29c-d.

106 This applies equally to Aristotle.

There is a dual sense of the Greek words *genesis* and *gignesthai* which are translated varyingly as “becoming” or “coming to be”.¹⁰⁷ Thus a statement that something “becomes” can be interpreted in two ways. It can mean on the one hand that an object comes into existence at a certain point in time, or it can mean that an object is involved in a continual process of change. The advocates of metaphorical interpretation claim that although the *Timaeus* appears to tell us that the universe is in “becoming” in the first sense that it should really be read as telling us that the universe is in “becoming” in the second sense.¹⁰⁸ On this reading Timaeus is trying to lead us to the belief that the universe is eternal but in a state of constant flux. The argument we find in the proem should be understood not as telling us that the cosmos requires a creator as much as that it requires a sustaining cause outside of itself.¹⁰⁹

So then what purpose does the metaphor serve? Why give an account of the universe as created in the first place? The traditional explanation is that Timaeus is merely following the example of the geometers. Just as they might speak of a triangle being “constructed” out of three lines or an infinite number of points, they do not mean to say that the triangle as such came into being at some point in history. That this particular reading is of some antiquity is shown by the fact that Aristotle felt a need to address it.

107 Cornford 25-6.

108 Further support is lent to this reading when one considers that time itself is included in the category of generated things at 38b. Presumably Plato would realize that the statement “time came into being at a certain time” is problematic to say the least, so the best way to read this would be to see it as indicating the dependence of time on eternity.

109 One result of this is that this ends up making Timaeus' Demiurge sound a lot more like Aristotle's unmoved mover than the God of Philo and Augustine. Some use this very similarity to argue that the advocates of a metaphorical reading must be misreading Plato. I however am of the opinion that Aristotle never strayed far from his Platonic roots and any reading of either that brings the two closer together is probably a better one.

They say that in their statements about its generation they are doing what geometricians do when they construct their figures, not implying that the universe really had a beginning, but for didactic reasons facilitating understanding by exhibiting the object, like the figure, in the course of formation.¹¹⁰

The strength of reading the dialogue in this way is that it allows us to fully appreciate both the rationality and the poetry of the *Timaeus*.

An Attempt at a Resolution

It is worth asking the question of why even Plato's most immediate students would be so willing to read his works allegorically. One nearly unavoidable conclusion is that they came to Plato's works with a different set of expectations than we might. Their expectations were a product of the forms of speaking and writing that existed in fourth century Athens rather than the conventions developed through twenty-five hundred years of subsequent philosophical writing. To them mythic discourse was still a live phenomena, not a mere historical curiosity.

However, myth to them was not a dead pile of old stories, but an idiom in which they could express themselves freely and a field in which to practice creative reinterpretation. This contemporary willingness to creatively decode mythology is satirized by Socrates in the *Phaedrus*. Socrates and Pheadrus, taking a walk outside the walls of Athens, come upon the spot where Boreas is reputed to have carried away Orithuia. Pheadrus asks Socrates whether he actually believes such stories, he responds as follows:

¹¹⁰ *On the Heavens* 279b33- 280a2. Trans. J. L. Stacks

Actually it would not be out of place for me to reject it, as many intellectuals do. I could then tell a clever story: I could claim that a gust of the North Wind blew her over the rocks where she was playing with Pharmaceia; and once she was killed that way people said she had been carried off by Boreas—or was it, perhaps, from the Areopagus?¹¹¹

It is reasonable to conjecture that an educated and intellectual audience in fourth century Athens, upon realizing the fundamentally mythic character of Timaeus' story would attempt to apply just such analytic techniques to it. They would attempt to come up with this sort of simple allegorical reading where fantastic elements of the story are replaced on a one to one basis with more mundane elements.

There is a portion of the dramatic introduction to the *Timaeus* which an attentive reader or auditor might easily construe as Plato coyly encouraging this method of interpretation. It is buried in a portion of the dialogue that seems otherwise pointless, namely Critias' overly long and convoluted attempt to forge a pedigree which authenticates and gives weight to his story of the war between Atlantis and the Ancient Athenians. The Atlantis story was related to Critias by his eponymous grandfather who in turn heard it from no less an authority than Solon. Solon, in turn, heard it from a nameless Egyptian priest. This priest chides Solon, and all Hellenes as people young in their minds. That is to say, they have short cultural memories. The reason for this is that the ancestors of the Greek people fell victim to one of many periodic natural catastrophes and lost the continuity of tradition, particularly written tradition, which would have allowed them to

111 *Phdr.* 229 c-d. trans. Alexander Nehamas and Paul Wooduff.

retain the memory of Atlantis. However, and this is where the priest's story becomes relevant to the interpretation of the monologue, the Greeks do retain a cultural memory of the catastrophe itself. In the words of the priest:

Thus the story current also in your part of the world, that Phaethon, child of the Sun, once harnessed his father's chariot but could not guide it on his father's course and so burnt up everything on the face of the earth and was himself consumed by the thunderbolt-- this legend has the air of a fable; but the truth behind it is a deviation of the bodies that revolve in heaven round the earth and a destruction, occurring at long intervals, of things on earth by a great conflagration.¹¹²

Here we have a concrete example of one way in which Plato shows us that rational sense can be made of mythic imagery. A story about the gods Zeus, Helios, and Phaethon, with their human-like deliberative processes, human-like passions, human-like errors in judgment and their human-like bodies is decoded as referring to the completely regular motions of the no less divine, but much less human, heavenly bodies.¹¹³ This may be understood as showing us the correct way to understand both Critias' Atlantis story and Timaeus' creation story. Fantastic divine causes should be naturalized but not de-

¹¹² *Ti.* 22 c-d.

¹¹³ Elsewhere I have stated that Critias is someone who it is indicated that we should take less than seriously-- or at least less seriously than Timaeus. However, Plato often allows even his less than ideal characters to say important things, although it often seems that they don't fully understand them. One need only think of Pausanias' self-serving speech in the *Symposium* for an example of this. It is largely empty of content, but serves to introduce the notion of higher and lower forms of *eros* that is developed more fully later in the work. The doctrine of periodic catastrophes seems to have been taken seriously in the early academy. See Cornford p. 14, fn. which supports the idea that the words of the priest here should be taken more or less seriously.

divinized.

However, such approaches have their limits. Just as surely as the *Timaeus* myth resists a straightforwardly literal reading it also resists any attempt to decode it as a simple allegory. As Francis McDonald Cornford wrote, the *Timaeus* myth contains: “an irreducible element of poetry which refuses to be translated into the language of scientific prose.”¹¹⁴ This is simply to say that an attempt to read the *Timaeus* using instruments as crude as simple allegorical interpretation are doomed to failure. One may make considerable headway in interpreting the *Timaeus* as allegorical. To steal a trivial example of this from Cornford, it frees us from having to assume that the demiurge employed an actual mixing bowl in the creation of soul. At a certain point however the interpreter who makes use of such “clever stories” will have to come to the realization that, just as Timaeus warned, the narrative still cannot be rendered entirely consistent and rational. Thus the allegorical reading must be supplemented with another approach.

However, in addition to being versed in allegory Plato’s original audience was presumably more attuned to the dramatic aspects of the dialogue than we tend to be today. Admittedly, the *Timaeus* lacks the overt and colorful drama of a dialogue like the *Republic* or the *Euthyphro*, but we should not let the lack of much physical or conversational action deceive us into reading it as if it were a straightforward treatise. If we take seriously Timaeus’ halting and provisional mode of presentation, another option is available to us—we can see Timaeus as developing his explanation of the cosmos rather than simply reciting it. The *Timaeus* is best understood as a representation of an

114 Cornford, 32.

evolving discourse. One very significant demonstration that this is what is going on is found in Timaeus' "new beginning" at 48d. Here we see Timaeus realize that his account is incomplete, that it leaves out the operations of necessity. Realizing this he retells his story to incorporate this second cause.¹¹⁵

The tension between the proem and the description of time is only problematic if we see the *Timaeus* as the result of an attempt to write a single coherent treatise rather than to model the correct way to conduct physical inquiry. If we take this latter possibility seriously we can see that the literalists are correct in that Timaeus begins his speech with the unambiguous belief that the cosmos is "generated" in the sense that it had a beginning in time. However, as Timaeus' monologue unfolds Plato illustrates the problems that such a position poses, especially when combined with a theory of time as derived from celestial motions. One non-trivial consequence of this reading is that the statements within the proem lose their alleged special status, they are just as open to revision as any other part of the discourse.

In the face of these problems, the reader, and Timaeus must revisit the meaning of these earlier statements and what was once literal becomes figurative. It is unclear whether Timaeus actually abandons the idea that the cosmos had a beginning in time, but according to this reading Plato is showing us that it could not have.

With this reading in place it can be seen that the *Timaeus* is not a straightforwardly dogmatic work. Its structure mirrors the aporetic structure of the Socratic dialogues. Plato

¹¹⁵ Consider also Timaeus' initial narrative of the body of the universe coming into existence before its soul, followed by a reversal of this position at 34c blaming it on his "casual and random" way of speaking.

has Timaeus articulate a dilemma: the cosmos is a visible and tangible thing; hence it must have a beginning at some point in time. Yet, the very notion of time without a cosmos is incoherent; hence the cosmos is such that it cannot have a beginning. The *Timaeus* then functions not as a simple cosmology, but as an illustration of the problems which must be solved in order for us to understand how it is that there is a cosmos at all. Assuming that this indeterminacy is built in to the dialogue, that the *Timaeus* is incomplete by design¹¹⁶ allows us to understand the early (and continuing) controversy surrounding the dialogue to be a part of the functioning of the work. The clashing “interpretations” put forward by Aristotle, Speusippus, and Xenocrates are not what we would understand as attempts to come up with “readings” of the dialogue, but rather attempts to address the fundamental problems that the dialogue raises.

¹¹⁶ This is a possibility that we might be led to suspect by the many allusions to incompleteness throughout the *Timaeus*—from the first line onward.

4: A Rough Draft of the Universe

In this chapter I deal with the section from Socrates' last line at 29d to the introduction of the “third kind” at 48e. This comprises Timaeus' first account of the structure of the universe and humans. Here we get a seemingly complete account which starts with the creation of the cosmos and ends with a discussion of human nature, organized around the loose theme of the purpose inherent in ordered systems. This is, of course, precisely the scope of the task given to Timaeus by Socrates at 27a. Were the text to end here, the work would not be thought incomplete. Still, this section is remarkable for its scope, its brevity, and its nearly unfathomable complexity. No one today would attempt such a thing, and even our more epistemically optimistic enlightenment predecessors might think that attempting to explain cosmogony, cosmology, theology, psychology, ethics, and biology, while giving a serviceable system of theoretical astronomy, and describing the nature of time is a bit much for nineteen Stephanus pages. Yet Plato has Timaeus attempt just this. Thus it is no wonder that the discourse is so compressed, that its maddening mathematical “proofs” are so obscure, and that at times his explanations appear so elliptical. In this section the earlier literary allusions to incompleteness are fulfilled. They serve to warn us that an account such as Timaeus gives is not only unavoidably an approximation (*eikōs*) but also necessarily incomplete. Each topic left out or glossed over, however, makes this account less like the all-embracing cosmos and its exhaustive model. This very incompleteness leads to the eventual collapse of this first

account due to its inadequate treatment of the forceful resistance of the natural world (*anankē*).

The structure of this section is complex, including a few reversals and revisions, but the account can be roughly divided as follows. First, Timaeus opens with a discussion of the implications of the craftsman analogy for understanding the cosmos. This involves a discussion of the cosmic blueprints that such a craftsman must use. This, in turn, has implications for the sort of universe which would result from this process, this leads naturally to a discussion of what materials the craftsman must use, the upshot of which is a novel reinterpretation of the four elements theory, a model already antiquated in Plato's time.

Second, having established that the cosmos is a living organism possessed of *nous*, and having broadly described what it would mean for it to have a body, Timaeus turns to a discussion of the soul which must animate it. This involves an obscure passage and to Timaeus's first significant revision of his account. The *psuchē* must be the sort of thing that exists in some way between the abstract blueprints used by the craftsman and the visible and tangible body of the universe. As it can apprehend both, it must have something in common with each. Timaeus is driven to produce a tortuous and famously opaque account of how something can have a share in both the aesthetic and the noetic while belonging to neither, an account in which some difficulties are glossed over, and mathematical excursions seem to obscure as much as they illuminate.

Of course, says Timaeus, the craftsman really created the soul *before* the body—but this very invocation of the concepts of “before” and “after” drives Timaeus to provide an

account of the origin of time.¹¹⁷ Time, it turns out, came into being with the motions of the heavens, so the soul cannot be temporally prior to the body at all. The earlier temporal sequence is transformed into a logical sequence. It is through devices such as this, that Plato preserves a dialectical structure of hypothesis and revision in a work which has the surface structure of a monologue.

The discussion of time is ultimately a failure, as evinced by Timaeus' punning admission that it is not *kairos* to talk of these things.¹¹⁸ However, it leads the speaker to a topic he, as an astronomer, is much more at home in, the motions of the heavens. Timaeus then elaborates an account of astronomy which reflects some of the better thinking of the day.¹¹⁹ The discussion of the heavens naturally leads to talk of the divine, and we then find ourselves in the midst of a discussion of the nature of the gods as the heavenly bodies, coupled with a markedly dismissive account of the traditional Olympian gods.

After this tour of all that is, we seamlessly segue to talk of the nature of human beings and our role in the universe. The question which becomes central is the one on which the justification of Timaeus' monologue rests. Given our role in the cosmos, what can the study of the visible universe do for us? The answer emerges that this study is key for the attainment of human excellence. The purpose of humans is, if the phrase can be excused, is to become more cosmic, to become more like the ideal image which encompasses all images within itself. In this closing portion we see how these elements that have thus far

¹¹⁷ This was dealt with in greater depth in chapter 3.

¹¹⁸ *Ti.* 38b.

¹¹⁹ Taylor connects the theories of Timaeus to Empedocles, Diogenes of Apollonia, and "Pythagoreanism" See Taylor ix, 39.

only been linked by the flow of conversation fit together. We see how the cosmos, society, and individual human beings are all structured by the same principle, the good in its manifestation as harmony and ratio.

The Craftsman and the Model

By the end of the proem the analysis of the generation of the cosmos in terms of the craftsman analogy has quite naturally led to the hypothesis of the cosmic craftsman. The first move Timaeus makes after his opening speech is exploring what is implied by this hypothesis. To determine the nature of the cosmic craftsman is to determine the *alēthēs logos* on which the existence of all rests. His nature then is the highest principle touched on in the first version of Timaeus' discourse, the *agathōsunē* of the craftsman.¹²⁰ The sense of goodness in play here requires some unpacking. Timaeus seems to understand goodness in a twofold sense. First, the cosmic craftsman is good in the sense that he possesses something analogous to human virtue, and second, he is “good” in the sense of being excellent at what he does. He has the virtue of a craftsman, in this case a craftsman of worlds. He then builds good worlds in the same sense that a good cobbler makes good shoes.

Being good in both senses, he is free from jealousy (*phthonos*) and because of this, he desires all things to be like him. This, for the first draft of Timaeus' account at least, is to be reckoned the “supreme *archē* of becoming.”¹²¹ This is a principle he does not argue

¹²⁰ This is the highest principle, though it is not a “first principle.” Timaeus does not deal with first principles, stating this at the outset of both versions of his monologue. At 27c we find that the maker and father cannot be communicated to all of humanity, and at 48c we find that he will not speak of *archas* in the sense of first principles..

¹²¹ *Ti.* 29e.

for, but rather accepts from “men of understanding” (*andrōn phronimōn*) in the manner of a dialectical thesis.¹²²

Of course, the visible universe is far from perfection, as are we, and Timaeus' acceptance of this principle contributes in part to the need for a later reformulation of the account with the introduction of necessity or force (*anankē*) as the errant cause. Yet this first draft is not without an essential role in the totality of the work. From the first line we are told that the subject of the discourse is perfection, the perfection of the sustaining cause and consequently the perfection of the universe and the soul. We are here given not things as they are, but things as they should be, and thus the stage is set for the conceptualization of *paideia*. Indeed, the craftsman seems to be modeled as much on the educator as he is on the manual worker. He does not rest content with making the cosmos, but rather he must make it and its inhabitants good. This portrayal of the demiurge as educator culminates with his later lecture to the gods, in which he appears a wise teacher, in addition to being a manual worker.¹²³

122 It is unclear who these wise individuals might be. This idea does not square up well with anything found in preplatonic thought. Archer-Hind (p 92, fn) speculates that these men might be Pythagoreans, on the basis of summaries of their doctrines found in later doxographers, but since Burkert these sources have fallen into disrepute as reliable reports of Pythagoreanism. The surviving fragments of Philolaus, the one preplatonic Pythagorean from whom we possess any writings mentions nothing of the sort. Perhaps the best explanation is that the *andrōn phronimōn* in question are no other than Socrates and his associates. Timaeus, already familiar with Socrates' way of thinking from their prior conversation, does what any skilled rhetorician would do; he tailors his speech to his audience, framing it in a way that resonates with their *ethos*.

123 *Ti.* 41 a-d.

O gods, works divine whose maker and father I am, whatever has come to be by my hands cannot be undone but by my consent. Now while it is true that anything that is bound is liable to being undone, still, only one who is evil would consent to the undoing of what has been well fitted together and is in fine condition. This is the reason why you, as creatures that have come to be, are neither completely immortal, nor exempt from being undone. Still, you will not be undone nor will death be your portion since you have received the guarantee of my will—a greater, more sovereign bond than those with which you were bound when you came to be. *Learn now (mathete)*, therefore, what I declare to you. . . .¹²⁴

Here we see the cosmic craftsman, upon his creation of the lesser gods, before all other things, giving them a lecture on metaphysics and cosmology. He speaks, of all people, like Timaeus himself. If we bear this analogy between Timaeus and the demiurge in mind, the meaning of the cosmic craftsman's dual characterization as educator and artisan becomes clear. Timaeus is, of course, a craftsman, a worker in the medium of words. He is, in his monologue, creating the cosmos in speech. This characterization of his activity is affirmed in the opening invocation to the *Critias* when he speaks of “the god who existed long before in reality but has now been created in my words.”¹²⁵ As a cosmic craftsman himself, Timaeus, too, must look to a model.¹²⁶ In his case, the model is furnished by the patterns laid down in his soul through his life under a good constitution

¹²⁴ *Ti.* 41a-b. Emphasis added.

¹²⁵ *Criti.* 106b.

¹²⁶ And again, there is another such craftsman, lurking outside the text, bringing *this* whole into being, Plato himself.

and his virtuous studies. Further, Timaeus does not speak without a reason. His discourse serves to edify the inhabitants of the cosmos outside his discourse—he provides a theoretical background for *paideia* and thereby links the speculation of the *phusikos* to the highest good. Beyond even this, in his capacity as a statesman who has held the “highest offices” in Locri, he is an educator again, introducing through laws the forms of life which allow the Locrians to attain *aretē*.

The next move made by Timaeus is to describe the material of this cosmic education. At this stage it is “tuneless and disorganized motion.”¹²⁷ The process of creation, then, is a process of organization for the best, just as *paideia*, and consequently politics are. Again, this follows from the nature of the craftsman as a craftsman, for this is the nature of all true craft as detailed in the *Gorgias*.¹²⁸

Then, in a remarkably abbreviated bit of reasoning, the last pieces are put into place. Since a supremely good craftsman would create the best, and since among sensible things the living is clearly better than the non-living, and the thinking is better than the mindless, then the demiurge would clearly craft a universe as an intelligent living being (*zōon*).¹²⁹

127 *κινουόμενον πλημμελως καὶ ἀτάκτως* Ti. 30a. Translation mine.

128 *Gorgias* 462b-568c.

129 *Ti.* 30 a-b. Here it might seem as if the analogy between Timaeus and the demiurge breaks down. After all, to consider Timaeus' monologue as a living being endowed with soul is a bit of a stretch. Surely the analogy is not perfect, but it should be pointed out that the Greek *zōon* is ambiguous, meaning both “animal” and “image.” Both senses are in play in the *Timaeus*. The cosmos is that animal that contains all other animals as parts, but also, as a reflection of the model, it is that image which contains all other images. Timaeus' monologue is not an intelligent animal, but it is an image structured by intelligence. Interestingly, Socrates likens a well constructed speech to a *zōon* in the *Phaedrus* (264c), adding another layer of parallelism.

Now it wasn't permitted (nor is it now) that one who is supremely good (*aristō*) should do anything but what is best (*kalliston*). Accordingly, the god reasoned and concluded that in the realm of things naturally visible no unintelligent thing could as a whole be better than anything that does possess intelligence (*nous*) as a whole, and he further concluded that it is impossible for anything to possess intelligence apart from soul. Guided by this reasoning he put intelligence in soul, and soul in body, and so he constructed the universe (*to pan*). He wanted to produce a work as excellent (*kalliston*) and supreme (*ariston*) as its nature would allow.¹³⁰

The qualifier “if possible” should perhaps be added to Timaeus' account, but since it is common knowledge that intelligent living beings are possible, we can see why it might be omitted.

Further, this reasoning is itself quite odd in another way. A good craftsman certainly creates things that are the best after their kind. To use Socrates' favored example, a good cobbler will create the best shoes. But this naturally, does not entail that the best possible cobbler would create living and intelligent shoes. These qualities do not improve the functionality of footwear. So it seems that what is intended here, is that out of all possible universes, one which is itself intelligent is better than the alternatives. Or alternatively, that since the universe contains intelligent parts, such as ourselves, if the universe as a whole were not intelligent then it would not be the fairest of all things but rather we would. But of course, Timaeus reminds us, all of this is but *eikōs*.

130 *Ti.* 30a-b.

Knowing all we need know about this craftsman, the efficient cause of the visible universe, we move on to what Plato is always far more interested in, final causation. This indeed may be why so little is said about the demiurge. As important as he seems to later monotheistic readers of the *Timaeus*, he is really not all that significant in the scheme of things. He merely set the process that is the visible cosmos in motion, or rather, serves to set the analysis of it in motion. What must truly define this process for Plato, the thinker of final causes, is the end it strives for.

The Stuff of Creation

Timaeus' first analysis of the sensible conditions of the cosmos is brief, especially by comparison to his second, highly geometrical account. Given that this first account is later supplanted, it stands to reason that this account is sketchy and incomplete by design.

Timaeus takes it as given that the physical theories of Empedocles and the Hippocratic school are more or less correct, so far as they go. The universe is indeed composed of the four elements. Where the previous accounts are incomplete is that they fail to give reason and purpose for this arrangement, rendering it ultimately unintelligible. Without an explanation for why there are four rather than three or five, and why these four, rather than some other four our understanding of the cosmos fails to meet the standards put forward in the *Phaedo* for a proper explanation of nature. Timaeus proposes a simple solution. The universe is made of the four elements *so that we may perceive it*. Visibility requires light and thus fire, tangibility requires something resistant and thus earth. Then, in a slightly more obscure fashion, Timaeus derives the other two elements.

[T]wo things alone cannot be satisfactorily united without a third; for there must be some bond between them drawing them together. And of all bonds the best is that which makes itself and the terms it connects a unity in the fullest sense; and it is the nature of a continued geometrical proportion to effect this most perfectly. For whenever, of three numbers, the middle one between any two that are either solids or squares is such that, as the first is to it, so is it to the last, and conversely, as the last is to the middle, so is the middle to the first, then since the middle becomes first and last, and again as the last and first become middle, in that way all will necessarily come to play the same part towards one another, and by so doing they will make a unity. Now if it had been required that the body of the universe should be a plane surface with no depth, a single mean would suffice to connect its companions and itself; but in fact the world was to be solid in form, and solids are always to be compacted not by one mean but by two. Accordingly the god set water and air between fire and earth, and made them, so far as was possible, proportional to one another. . . and thus he bound together the frame of a world both visible and tangible.¹³¹

This passage displays the enigmatic mathematical reasoning that Plato's *Timaeus* is famous for, but what can be made of it? The mathematics involved is puzzling to commentators ancient and modern alike.¹³² Cornford is driven to remark upon how Plato

131 *Ti.* 31c-32c. Trans. Cornford.

132 Out of the major commentators, Cornford probably does the best job of rendering the mathematical arguments coherent and as plausible as possible.

is “compressing his statement of technical matters to such a point that only expert readers would fully appreciate his meaning.”¹³³ However, given the difficulties this passage poses to more recent experts such as Heath, one may wonder whether producing an intelligible mathematical account was Plato's primary goal here. Rather he may be using the language of mathematics to express a philosophical point in the same way that elsewhere, in the he uses the language of myth to provide memorable philosophical allegories.

Further support for this view may be derived from considering the way a text like the *Timaeus* would have been experienced in the fourth century. There is substantial evidence suggesting that Plato's works were most likely originally experienced in the same manner that all ancient books were—as read aloud to an audience.¹³⁴ If this is the case, then in interpreting Plato's dialogues, it is important to approach them as an auditor would, rather than as a textual scholar would. An auditor would not have the opportunity to parse this passage line by line, discovering each hidden inference. Rather he would simply grasp the passage as a whole, extracting the general point as best he could, before the reader moved on to the next part. The entire passage concerning the construction of the world soul then would represent less than ten minutes out of a nearly three-hour reading.

Proceeding from this hypothesis, we can see that in the end, his method is a simple one, though the explanation is not. First he shows the necessity of the elements for a visible world, describing them as the ingredients of sensory experience. Obviously, the

133 Cornford 47.

134 A useful survey of the evidence for this claim may be found in Joanne Waugh, “Neither Published Nor Perished: The Dialogues As Speech, Not Text,” *The Third Way: New Directions in Platonic Studies*, ed. Francisco J. González (Lanham: Rowman & Littlefield 1995)61-63.

fundamental components of a sensible world are the fundamental objects of sensation. Thus, the traditional elements must be reinterpreted as the most general components of *aisthēsis*. Then he describes the conditions which must obtain in order for them to form a world in the first place. The “bond” of proportion which holds them together is merely a demonstration that they can stand in definite relationships to each other. For if they could not relate to one another, they could not form a world together. Further, that they stand in a relation where “the first becomes last” shows that they form interchangeable elements. Since each plays the role of all the others, they are all fundamentally alike, like hoplites marching in a unified formation. Their bond of proportion alone is merely dry and schematic. What is important is what it enables. By setting up this similarity among elements, *philia* may arise among them, and allow them to form a coherent whole in our experience. Thus Timaeus gives an account in conformity with Socrates' critique of Anaxagoras in the *Phaedo*. There are four elements because it is better that it is this way.

The Soul of the Cosmos

The cosmos has a body, but still awaits a soul. This leads to a passage even more obscure than the argument for the elements, however, following the method outlined above, one can see that a simple message underlies its mathematical complexity.

The general drift of Timaeus' account of the generation of the world soul can be summed up as the construction of more and more concrete descriptions of things stemming from a few general principles. Thus the structure of the creation of soul parallels, and perhaps parodies, the techniques of geometrical proof. The progressive

structuring of the world soul is a dramatization of the derivation of the concrete from the abstract, as well as a mythologized account of how the concrete contains the abstract.

He begins with the highest possible abstractions, the *megista genē* famous from the *Sophist*, identity, difference, change (as divisibility), rest (as indivisibility) and *ousia*. These are the most general determinants of being, whether sensible, intelligible, or something in between. They are necessary both for the world soul to be an entity at all, and for it to be able to recognize sensible and intelligible things, for to recognize something is to see it in relation to other things, as identical to some, in some respects, and different from them in other respects.

In between the *Being* that is indivisible and always changeless, and the one that is divisible and comes to be in the corporeal realm, he mixed a third, intermediate form of being derived from the other two. Similarly he made a mixture of *the Same* and then one of *the Different*, in between their indivisible and their corporeal counterparts. And he took the three mixtures and mixed them together to make a uniform mixture. . .¹³⁵

Through combination and recombination, in a metaphorical mixing bowl no less, the craftsman compounds a numerical structure out of these simple ingredients.¹³⁶ This takes us out of simple logical relationships and into complex proportional and harmonic relationships. Numbers and mathematical relationships presuppose the basic categories, without difference, no two numbers could be distinct, without sameness, no group of

¹³⁵ *Ti.* 35a.

¹³⁶ The bowl appears at 41d. This passage alone is enough to show that there is a willingness to indulge in the comic at play in this section.

units could form a number, nor could numbers relate to one another in any way.

Now when he had mixed these two together with Being, and from the three had made a single mixture, he redivided the whole mixture into as many parts as his task required, each part remaining a mixture of the Same, the Different, and Being. This is how he began the division: First he took one portion out of the whole, then he took another, twice as large, followed by a third, one and a half times as large as the second and three times as large as the first. . . After this he went on to fill the double and triple intervals by cutting off still more portions of the mixture and placing these between them.¹³⁷

This passage, of course, describes the construction of a musical scale, as every commentator from Crantor onwards has reminded us. As Theon points out, this scale is not at all useful for playing actual music, since it involves notes beyond the range of most singers, and tones so finely grained that hearers would not be able to distinguish them.¹³⁸ It appears that the scale itself was most likely cribbed from Philolaus, and perhaps this is what occasioned Timon the Sillographer's accusations of unoriginality.¹³⁹ All that this ancient controversy serves to show us is that Plato's original auditors would have picked up on the references to the concepts of harmonics, though few, if any, gleaned any more than that.

137 *Ti.* 35b-36a.

138 Theon of Smyrna, *Mathematics Useful for Understanding Plato*, trans. R. D. Lawlor (San Diego: Wizard's Bookshelf 1979) 42.

139 Carl Huffman, *Philolaus of Croton*, (Cambridge: Cambridge UP 1993) 149-50.

From the arithmetical, is then constructed the geometrical, since arithmetical relationships can define spatial relationships and thus geometrical structures. Of course, in the monologue, this idea is presented in through the picturesque and humorous imagery of the craftsman rolling out and cutting up the “dough” of the soul. This dough is formed into a divided set of circles which form an intelligible skeleton for the visible world.

Next he sliced this entire compound in two along its length, joined the two halves together like an X, and bent them back in a circle. . . he divided the inner one six times, to make seven unequal circles. His divisions correspond to the several double and triple intervals of which there are three each.¹⁴⁰

Thus the raw geometrical relationships are used to define astronomical structures, moving yet another step closer to the world of sensory experience. All that is needed is something to make this structure perceptible, and thus available to us as an object of contemplation, and this has already been provided by Timaeus' account of the elements. The soul can then be “woven together” with the body. The elements exist so that we might see, and the cosmic soul exists to give us something definite to see.

Ethics and *Paideia*

This characterization of the soul is but one of many that we find throughout Plato's works. Such models may be found in the *Phaedo* and the *Republic* for example. This one however is tailored to the concerns of this particular dialectical exercise, and thus

140 *Ti.* 36d.

contains features, such as quasi-spatial extension that we do not find elsewhere. Which account of soul is the most authentically Platonic? All we can say is that the model we find in the *Timaeus* is *eikōs* as any other.

The soul is a compound of identity and difference, containing the elements of *arithmetikē*, and held together by the bonds of harmonic proportion. By virtue of this structure, whenever it encounters an entity:

[I]t is stirred throughout its whole self. It then declares exactly what the thing is the same as, or what it is different from, and in what respect and in what manner . . . this applies both to the things that come to be, and those that are changeless.¹⁴¹

In a way which would make Anaxagoras and later Aristotle proud the soul contains the elements of all things, both noetic and aesthetic.

Timaeus' cosmology also serves as a fitting response to Socrates' initial challenge, for in the end it is also a psychology. Thus Timaeus gives his account both scope and economy. The elements of cosmos and soul are the same. The cosmos is conceived of as a living thing, formed of a divine soul wedded to a visible body. There is a direct correspondence between the way the soul of the cosmos functions and the functioning of the human soul. It relates to the cosmos as a whole both in a part/whole relation and through a homology of structure. Further it too must contend with its embodiment just as we must contend with ours. The only important distinction is that the cosmos is an independent and practically incorruptible being, while we are dependent and corruptible.

141 *Ti.* 37a-b.

But this insurmountable difference between the individual and the universe actually serves to strengthen the connection between the cosmos and the individual. The cosmos is a more perfect being than we, but one of such similar constitution that it serves a normative role with regards to us. Thus Plato pulls an ethical rabbit out of a cosmological hat; due to this correspondence between soul and cosmos even the most obscure questions about the universe have an ethical payoff. The study of the motions of the stars and the cycles of nature is a study that rewards us with a deeper understanding of ourselves. For Timaeus, astronomy *is* psychology.

In order to achieve this *mimesis* of the divine one must master one's emotions and also the mass of the material body. This is accomplished by bringing both into accord with reason.¹⁴² Thus, the process of maturation, from birth onward, is one of the emergence and development of the faculty of *logos*. The initial state of the human being at infancy is one where neither the body is master of the soul nor the soul the master of the body, both are in such a disordered state that neither can attain supremacy.¹⁴³ But with the right nurture, the soul can come to more closely resemble the cosmos, and thus master its embodiment.

The right employment of the senses allows us to achieve this developmental trajectory. The ultimate purpose of our physical senses is to discern the order found within the visible world and reproduce this same order within our own souls. Timaeus analyzes both vision and hearing in these terms. The process of vision is mechanical in its operation, but not haphazard and purposeless. By allowing us to observe the natural cycles such as

¹⁴² *Ti.* 41d-42e.

¹⁴³ *Ti.* 43a-b.

the regular alternation of day and night and the precession of the seasons, led to both the invention of number and the disclosure of time.¹⁴⁴ This, in turn, directs us to deeper inquiries into the nature of the cosmos, which then opens the road to philosophy.¹⁴⁵ We use vision to study the motions of intelligence in the heavens, and we then apply these motions to our own soul. This is a process of bringing the individual soul into a closer resemblance to the more perfect cosmic soul.¹⁴⁶ This is, declares Timaeus, the supreme good offered us by eyesight, something which lies beyond the visible. This analysis is repeated with respect to hearing in the following passage. Hearing exposes us to harmonies and enables us to reproduce them within the orbits of our own souls. Thus the purpose of the senses is paradoxically to acquaint us with what is not sensible, the patterns which are set into nature.

The individual soul is an entity which may be configured in many ways. It may possess strong circles and in its structure resemble the cosmos of which it forms a part—or it may find itself in a state of unorganized motion, and more closely resemble the precosmic chaos. In this latter state it declares of things which are identical that they are different, and of things which are different that they are identical in some respect which they are not.¹⁴⁷ The disordered state of the soul which we are born into is a result of the overwhelming barrage of sensory input to which we are constantly subjected.¹⁴⁸

144 *Ti.* 47a.

145 This passage reflects the historical development of Greek philosophy, from its materialistic beginnings with the Ionian *phusikoi* and developing into philosophy proper.

146 *Ti.* 47b-c.

147 *Ti.* 43c-44b.

148 *Ti.* 43c.

Sensation then may be thought of as *pathē*, the state of being affected by something external. The passions are ways of being affected by the world, they are part of the stream of external data as surely as simple sensory qualities. The task of the soul is to master all of these forms of *pathē* and reestablish the cosmic order within itself. This metaphor is doubly important. First it shows us that the end state towards which the soul naturally tends is one of knowing the cosmos, but further it tells us what, in part, this knowledge consists in. It is not a representationalist picture in which the soul contains an image of the cosmos, but a different sort of representationalism where the soul *becomes* an image of the cosmos and comes to know its structure through a reflexive knowledge of its own structure.

Furthermore we are given another important clue to the relation of character virtue and knowledge. The two are tightly connected, in part, because they are the same process. To know is to attain mastery of, to rightly structure, the input from the world, perceptual and emotional data alike. The organization of the passions by *logos* and the organization of sensory simples are two aspects of the single process by which the soul becomes an image of all things both sensible and intelligible.

The dramatic framing story without Timaeus' monologue and the analogy between the cosmic soul and the individual soul within it would each individually be enough to strongly suggest that the *Timaeus* ought to be read as a work devoted to ethical and paideutic concerns. When they are taken together, the case becomes very strong indeed. Everything that was spoken of before this serves as a theoretical scaffolding for this discussion of the virtuous life.

How is Timaeus' grandiose vision to be achieved? How can we become like the divine? In the end the method is simple. Timaeus' *paideia* consists of gymnastics for the body and philosophy for the soul both applied within a well-governed polis, exactly the program laid out by Socrates at the very beginning. Timaeus deepens the reader's understanding Socrates' very traditional notion of education by providing a view of the goal of this process as nothing less than the *mimesis* of the divine, an overcoming of the dissonance between reason and passion, between soul and substrate in order to be more fully a part of the universe which is our home, our sustainer, and our creator.

5: Fleshing out the Cosmos

The account as it has been given so far has presented a thoroughly teleological account of the cosmos and the beings who inhabit it and form its parts. Yet, beginning at 47e Timaeus undertakes a complete revision of this account which takes up roughly half of the dialogue. We are told that the discourse thus far, the account which seemed so complete, was merely part of the story. He has furnished his audience with an account of the workings of *nous*. There remains to be given an account of what comes to be as a result of *anankē*. The cosmos is a result of the joint action of *nous* and *anankē*: “Reason overruled Necessity by persuading her to guide the greatest part of the things that become towards the best; in that way and on that principle this universe was fashioned.”¹⁴⁹ Thus what is required is an examination of the form of this “errant cause,” and an inquiry into the formation of the elements, a feature of the cosmos which had hitherto been taken for granted.

Yet the addition of *anankē* to the story is no *mere* addition. It requires a that he “begin once more.”¹⁵⁰ The freshness of this new start is underscored by the fact that Timaeus prefaces this portion of the discourse with a secondary proem—found at 48d-e:

149 *Ti.* 48a.

150 *Ti.* 48e.

. . . [H]olding fast to what I said at the outset—the worth of a probable account—I will try to give an exposition of these matters in detail, no less probable than another, but more so, starting from the beginning in the same manner as before. So now once again at the outset of our discourse let us call upon a protecting deity to grant us safe passage through a strange and unfamiliar exposition to the conclusion that probability dictates; and so let us begin once more.

All of the essential features of the original proem are found again. Timaeus insists upon the *eikōs* nature of his discourse, and even offers a new invocation. Timaeus repeatedly uses phrases which underscore that this is a return to the start. Why is a complete return to the start necessary at this point? What went so wrong with the original version?

Though the first version of the monologue had much of value in it which continues to guide the rest of the monologue, it must be reckoned as a failure. It showed its inadequacy in at least three ways. The first and most important of these, is that Timaeus has made the signature error of the “friends of the forms” which the Eleatic Stranger warns us against in the *Sophist*.¹⁵¹ He has failed to recognize the real existence of becoming. The real, and indeed eternal, existence which underlies change is portrayed as *anankē*, and that which bears the responsibility of *anankē* is later described as the receptacle or place of becoming.

Cognate with his blindness to the being of becoming, Timaeus has formerly been too confident in the power of human understanding to grasp all of that which is essential to

¹⁵¹ *Sophist* 248a-249d.

the structure of what is. He has failed to pay his due respect to the irrational. Now he must admit that some things lie outside the limits of understanding proper—that any rational understanding of the world will leave behind some residue of the unknown and unknowable. He will later describe the receptacle as:

[A]pprehended without the senses by a sort of bastard reasoning, and hardly an object of belief. This, indeed, is that which we look upon as if in a dream and say that anything that is must needs be in some place, and that which is not somewhere. . . is nothing. Because of this dreaming state, we prove unable to rouse ourselves, and draw all these distinctions and others akin to them.¹⁵²

It escapes *nous*, it is not an object of *aisthēsis*, nor may it even be said to be an object of *pistis*. It defies all of the usual means of grasping the phenomena which comprise the world, because it is not itself a phenomenon, but that in which some phenomena occur. It is epistemically problematic, to say the least—grasped only by an illegitimate, dreamlike, employment of *logos* which nonetheless allows us to state the truth.¹⁵³

A tertiary problem with the first account is the incoherence of Timaeus's attempt to assert a beginning of time, and thus to deny temporal predicates to the supposed events which preceded the formation of time. After his new beginning, Timaeus ignores this earlier assertion, and has no issues with referring to the time before the cosmos proper came to be.¹⁵⁴

152 *Ti.* 52b-c.

153 *Ti.* 52c.

154 See, for example, 52d.

The Receptacle

Nous, and *anankē* jointly bear the responsibility for the sensible cosmos. Timaeus posits the receptacle of becoming as the origin or site of *anankē*, it serves the same role with respect to *anankē* that the paradigm serves with respect to *nous*. With the hypothesis of the receptacle in place, a fuller classification of the components of the cosmos is established.¹⁵⁵ Instead of merely speaking of the paradigm and its copy, he must speak of the paradigm, the copy, and the receptacle.

The receptacle is described by four sets of metaphors: metaphors having to do with reproduction and child-rearing; metaphors of location; metaphors of underlying substance; and metaphors of random motion.

The receptacle is described at 49a as the “nurse” of all becoming. Later at 50d we are told: “Indeed we may fittingly compare the recipient to a mother, the model to a father, and the nature that arises between them to their offspring.”¹⁵⁶ It is described as the place in which becoming becomes at 52b-c. This use of feminine metaphors shows the reader how the receptacle is to be understood as something which nurtures and develops the sensible cosmos. Though *nous* must “overrule” *anankē*, though *anankē* must be “persuaded” to guide things towards the best, it is a mistake to simply identify it, as Plutarch does, simply with the bad.¹⁵⁷ Likewise it would be a mistake to assume that

¹⁵⁵ *Ti.* 48e.

¹⁵⁶ Interestingly enough, the appellation of “father” was, in the first version of the account, applied to the demiurge at 28c. The transfer of this title to the paradigm has metaphorically cuckolded the demiurge, reducing him in importance. Indeed, he only makes two, very brief, appearances after this, at 53b, and at 69b. He is not mentioned at all in Timaeus' closing prayer.

¹⁵⁷ See Taylor 300.

because it is gendered as feminine that its role in the generation of the sensible cosmos is at all passive. Rather it makes a distinct, positive contribution to the cosmos.

The name “receptacle,” as a sort of container, is already a spatial metaphor. This line of images is further developed through the monologue. It is early on characterized as that “in which” (*en hō*) processes come into being.¹⁵⁸ Later this is further fleshed out. The three ingredients of the cosmos, we are told, are “unchanging form,” the sensible which bears the same name as the form, and third, there is *chōra*: “Third is Space (*chōra*) which is everlasting, not admitting of destruction; providing a situation for all things that come into being”¹⁵⁹ And later

“[W]heras for an image, since not even the very principle on which it has come into being belongs to the image itself, but it is the ever moving semblance of something else, it is proper that it should come to be *in* something else, clinging to some sort of existence on pain of being nothing at all”¹⁶⁰

The very nature of an image is that it requires something other than itself to ground its being—and this something else cannot be that which it is an image of, thus we must posit the receptacle as a kind of location and substratum. Timaeus finally chooses the word *chōra* to describe it. This is a rich word, meaning “place,” “position,” “country,” and “uncultivated land” among other things.¹⁶¹ All of these meanings point to a kind of emptiness or absence where something belongs. It is, however, a mistake to analyze this,

158 *Ti.* 49e.

159 *Ti.* 52a-b.

160 *Ti.* 52c.

161 Liddell and Scott 2015.

as Cornford does, as meaning that the receptacle can be identified with “space” and then to go ahead and draw a contrast between time as a product of the model and space as the nature of the receptacle.¹⁶² Space is something which has an intelligible structure all its own, understandable through geometry.¹⁶³ Rather, the *chōra* here is something which *underlies*, but is not identical with the space of our experience, just as its surging motions underly that which we experience as time.¹⁶⁴

Finally, the receptacle is described in terms of a substratum. It is likened to a metal, out of which many objects can be made.¹⁶⁵ Later it is likened to the scentless base of an oil or perfume.¹⁶⁶ It lacks any characteristics of its own, in order to better take on the characteristics impressed upon it. The four elements, and the compound things made out of them are just modifications of this indefinite stuff, analogous to Anaximander's *Apeiron*. As something which has no characteristics gives our speech nothing to fasten upon, compounding the difficulty of describing it properly.

162 Cornford 191-197.

163 Burnet, unlike Cornford, recognizes that the *chōra* is both temporal and spatial in nature. Unfortunately, he then goes on to identify its spatiality in terms of Cartesian, geometrically definable extension. “That the so-called primary matter of the *Timaeus* is space of three dimensions and nothing else is certain. . . . Plato undoubtedly means to say that the corporeal can be completely reduced to extension geometrically limited.” John Burnet, “*Greek Philosophy: Thales to Plato*,” (London: MacMillan 1914) 344.

164 Interestingly, Plato's *chōra* has enjoyed a resurrection of sorts in recent continental thought. Julia Kristeva borrows the term to refer to the pre-linguistic, pre-rational, disunified but still ordered space occupied by the body and (Freudian) drives. This reading has influenced later poststructuralists. Ironically, what Kristeva explicitly presents as a creative reinterpretation of Plato's *chōra*, is truer to what I believe Plato is trying to convey than the interpretations proffered by many Plato scholars. See *The Portable Kristeva*, ed. Kelly Oliver (New York: Columbia UP 2002) 35-39.

165 *Ti.* 50a-c.

166 *Ti.* 50e.

But, although the receptacle possesses no positive character, it does possess inherent dynamism. It is “filled with powers.”¹⁶⁷ It is in perpetual motion, continually shaking and swaying. It is the ever-moving process of differentiation, causing the cosmos to continually alter itself. But, again, its role here is not purely negative. Its continual shaking acts like a winnowing basket.¹⁶⁸ The constant motion of the receptacle naturally separates like from unlike and places like with like—thus the randomness of its motions serves a unifying function. It is only due to this sorting function that the cosmos comes to have a structure where each element occupies its proper place in the scheme of things—so once again we see that the *chōra* has a unique contribution to the cosmos.

That the descriptions of the receptacle verge on the incoherent has been noted by many commentators.¹⁶⁹ But this must be by design—it is a feature of its nature as something which lies outside of the scope of *nous*. Such an obscure and irrational thing cannot but be somewhat incoherent. This incoherence leads to the description of the receptacle with a mixture of the traditional Eleatic marks of being and non-being. On the one hand, it is eternal and indestructible.¹⁷⁰ It is “always the same” and “never departs at all from its own character.”¹⁷¹ Yet, at the same time, it is unintelligible, characterless, and constantly changing. It, strictly speaking, neither is nor is not—or rather both is and is not.

167 *Ti.* 52e.

168 *Ti.* 52e.

169 See, for example, Kenneth Sayre, “The Multilayered Incoherence of Timaeus' Receptacle,” in Reydhm-Schils, *The Timaeus as Cultural Icon* 60-79.

170 *Ti.* 52a-b.

171 *Ti.* 50b.

Given all of this, what can be said of the receptacle and of *anankē* which it gives rise to? It would be a mistake to construe the opposition between *nous* and *anankē* as an opposition between final causation and mechanistic causation. As Cornford points out, mechanism is lawlike, the lawlike is the height of intelligibility, and therefore any law of nature must belong to *nous*.¹⁷² More sophisticated and appealing, but ultimately flawed as well is Taylor's understanding of *anankē* as "brute fact."¹⁷³ On Taylor's reading, there always are some unexplained facts which must be taken as given. These facts could be explained, but since any understanding of the cosmos is incomplete, there will always be *some* unexplained facts. This dovetails nicely with the notion of an *eikōs logos*, however it does not work because *anankē* is described as a positive cause of the visible cosmos, not as a privation of our knowledge.¹⁷⁴ Cornford's reading of *anankē* is more nuanced, he identifies it with chance and spontaneity.¹⁷⁵ *Anankē* for him is a force for disorder, identified with the blind and unruly operations of nature. Chance, for him, is opposed to design. This is more in line with the text, but it fails to duly appreciate the way in which the receptacle functions as a nurse of the visible cosmos, and the way in which it contributes to the ordering of that which it contains. A mother or nurse may be unreasoning, but cannot be unfeeling or unwillful—there is an irreducible element of something at least analogous to life within the receptacle. Taking this into consideration, *anankē* is best regarded as a sort of unruly but enthusiastic *connatus* found within nature itself. It is the boundless and unpredictable force which animates the natural world. If

172 Cornford 164-5.

173 Taylor 301.

174 See also Cornford 165.

175 Cornford 165-73.

the *chōra* is undeveloped land, then *anankē* is the wild but not unstructured growth of plants that one finds in such lands. It is ultimately similar to the “striving” of the objects of the experience for the things themselves found in the *Phaedo*.

The Polymorphous Body

Plutarch famously attributes to Plato the saying “God is always doing geometry.”¹⁷⁶ Though he may not have, and indeed probably did not, say this, it is an apt summary of what follows the discussion of the receptacle. Timaeus' divine craftsman does geometry in the literal sense of measuring out the earth, in this case, the undeveloped land that is the *chōra*. After the fashion of an Egyptian surveyor, he parcels it out into neat little triangles, and dividing these parcels among the elements. He “began by giving them a distinct configuration by means of shapes and numbers.”¹⁷⁷

Unlike the notoriously obscure discourse on the cosmic soul, the mathematics of this section are far less controversial. This section gives us a plausible account of how the complex bodies of the world of *aisthēsis* can be constructed out of geometrical simples. Once again we get an account of how the simple yields the complex, and how disorder gives rise to order. This account however, we are told again, is merely *eikos*.¹⁷⁸ It is a mere proof of concept, a plausible description of how things might work—but such is the nature of the subject matter, as the sensible world admits not of knowledge, strictly speaking.

176 Plutarch Questions Conv. VIII.2 in *Moralia*.

177 *Ti.* 53b.

178 *Ti.* 53d.

Nonetheless, for the sake of completeness, we get a reduction of the traditional *stoicheia* to simple solids. Further we are treated to an account of how the elements (save for earth) mutually transform into one another in a determinate cycle. Thus, the concept of the cyclical transformations of nature, treated as a necessary feature of the cosmos in the *Phaedo* is given a geometrical undergirding. This process of transformation might lead to the cosmos tending towards a state where all of the elements are evenly intermixed—were it not for the sorting activity of the receptacle, which through its shaking draws each element back to its proper place.¹⁷⁹ This sorting, however, might lead to a cosmos which flies apart, each element fleeing the others for its own kind. So this process must, in turn, be counterbalance by another—the rotation of the cosmos compresses the elements together, and forces them to live with one another.¹⁸⁰ These three interacting processes then combine to form an account which shows us the sort of dynamic balance which must obtain in order to have a self-sustaining cosmos.

Yet this section, as impressive as it is, does not exist for its own sake, but for the sake of the subject which follows—an extended discussion of embodiment, the most detailed account of the body which we find anywhere in the Platonic corpus. The description of the self-sustaining cosmos serves as a model for the description of our self-sustaining bodies. The cosmos which consists of layers of elements, each with their proper place becomes the body, consisting of layers of marrow, bone, and flesh. The mutual transformations of the elements prefigure the transformation of the tissues of the body

179 *Ti.* 57c.

180 *Ti.* 57d-58c.

into one another.¹⁸¹ Finally, the shaking of the *chōra* which sorts the cosmos is active in the body as well. Late in the dialogue, we are told that the proper way to care for the body is to “imitate what we have called the foster mother and nurse of the universe, and never, if possible, allow the body to rest in torpor.”¹⁸² Thus the receptacle becomes the proper object of emulation for the body. The boundless and energetic though ultimately unintelligible striving which is *anankē* manifests to us most intimately as the life of the body.

It is only in the final third of the *Timaeus* that we come to see the paramount importance of the body, but it is a subject which requires all of the resources of the earlier two sections. Page after page is given over to first detailing the mechanisms of perception, and then a detailed account of the diseases and other affliction suffered by the body. The body mediates between the soul and the external world. Through the body, through the reasoned use of the senses, we come to know the cosmos, and thus perfect the soul. The body, then, is the condition for the possibility of philosophy. Had we no bodies, were we discarnate souls, we would have no need for philosophy at all, we would already be perfect in soul. The body further furnishes us with the senses necessary for the practice of philosophy. It is only through embracing our embodiment, through sensory exploration and gymnastics, that we are able to overcome it. Indeed the *Timaeus* may be seen as a tale of two bodies. The body of the cosmos mediating between the paradigm and the *chōra* and the human body mediating between the divine part of us, and our choric life process.

181 *Ti.* 82a-e.

182 *Ti.* 88d.

As for the body itself, it is a complex phenomenon. It is not merely the visible fleshy thing that we are accustomed to seeing, but it reaches out into the world, intertwining with it. The beams of subtle fire which Timaeus has shooting out from our eyes are part of our body as well, as is demonstrated by his attempt to give an explanation as to why we feel no pain when they are severed.¹⁸³ It further incorporates an elaborate basket like structure of air and fire which fills the lungs and reaches out beyond the skin, enabling respiration and circulation.¹⁸⁴ Moreover, the human body contains within it the potential to become other sorts of bodies. In order to answer the question of why we have fingernails, we are told the following:

[T]he true reason and purpose of this work was for the creatures that would be hereafter. For our framers [the lesser gods] knew that some day men would pass into women, and also into beasts and that many creatures would need nails (claws and hoofs) for many purposes; hence they designed the rudiments of this growth from the very birth of mankind.¹⁸⁵

This nominally fits into Timaeus' narrative of reincarnation. According to his story the first generation consisted entirely of male humans, and only in subsequent generations did women and animals emerge, as the members of the first generation assume forms more appropriate to the sorts of vice they embraced.¹⁸⁶ The patent absurdity of this story was surely noticeable to the original audience. After all, one need merely ask where the

183 *Ti.* 64d-e.

184 *Ti.* 78b-e.

185 *Ti.* 76d-e.

186 *Ti.* 90e-92c.

subsequent generations came from in a population incapable of breeding.¹⁸⁷ Even if one accepts this story, however, it still remains strange that a process of reincarnation, in which the soul acquires a *new* body would require that the original body be able to physically become other sorts of animal. The real function of this passage would then seem to be a reminder of the continuity of our flesh with that of other species. It casts the human being as the animal which potentially *is* all other animals, just as the cosmos is the animal which *contains* all other animals. Once again, the human body is the visible cosmos writ small.

After this lengthy discussion of the body, Timaeus turns back to the topic of the care of the soul—only this time it receives a fuller treatment illuminated by his medical discourse. The whole self is tasked with caring for the divine *nous* within it, likened to a guardian *daimon*.¹⁸⁸ The body can support and enable this task, or it can, on the other hand, corrupt the soul. If the body becomes overwhelmed by excessive pleasures or pains, it will overwhelm the circuits of the mind, and render it unable to realize its end.¹⁸⁹ Further, if the body is poorly tended, and becomes polluted with bile and other products of decay, it will fall to character vices such as depression or cowardice. Likewise, a body which is too weak to support its soul will be worn out and fall to disease, but a body which is too strong for its soul will strengthen the appetites to the extent that the *nous* will be rendered stupid.¹⁹⁰

187 This passage alone is a sufficient argument for interpreting all of Timaeus' talk of the creation of the cosmos as a metaphor for timeless dependence. One may get around this difficulty by positing a few autochthonous generations, such as one finds in the *Sophist* myth. However, there is no indication within the text of the *Timaeus* that any such thing was intended.

188 *Ti.* 90a.

189 *Ti.* 86b-87b.

190 *Ti.* 88b.

This section of the dialogue bears more than a passing resemblance to Erychimachus' speech in the *Symposium*. Both he and Timaeus give an account of the universe and the body in terms of the play of cosmic forces. But where Erychimachus ignores the soul entirely, and claims all of the benefits of philosophy for medicine, Timaeus recognizes the interplay of soul and body. Indeed, through this final section discussions of the soul alternate with discussions of the body in a way which rhetorically exemplifies their interdependence.

The good life depends upon a recognition of the unity and distinctness of body and soul. The body is maintained by imitating its prototype and substance—the receptacle, and the divine part of the soul is maintained by imitating its prototype and proper object—the paradigm. This is accomplished by using the senses to study the most perfect reflection of it, the visible god that is the cosmos. Thus the disparate body and soul, and even the individual and the cosmos, are unified in the practice of philosophy.

Conclusion

This essay as a whole may be considered a corrective to those who would treat the *Timaeus* as a textbook of Platonic physics. In this category we find, in the ancient world, Iamblichus, who, in assigning the *Timaeus* the penultimate place in his curriculum cemented a tradition of regarding the *Timaeus* as Plato's definitive statement concerning the sensible world. In the nineteenth and twentieth centuries, we see Jowett taking this tack, and informing us that: "The dialogue is primarily concerned with animal creation."¹⁹¹ Given that this is obviously not as important as "the mystery of being and not-being, or to the great political problems which he discusses in the Republic and the Laws" the *Timaeus* must be understood as a sort of ancillary dialogue, devoted to a kind of intellectual recreation.¹⁹² Taylor slightly modifies this reading. For him, the dialogue is not to be read as expressing *Plato's* opinions of the natural world. "The very dramatic and historical rightness of these touches should make us slow in assuming that Plato meant to give out any of these theories as his own."¹⁹³ but is rather an exploration of the sort of theories which a fifth century pythagorean *might* hold. We should expect of these theories only: "that they shall be the best approximations to it which could be expected from a geometer-biologist of the fifth century."¹⁹⁴ Why Plato would engage in such a dry

191 Jowett 344.

192 Jowett 344.

193 Taylor 19.

194 Taylor 19.

and uninteresting exercise, Taylor does not tell us. But nonetheless, he reads the dialogue as being primarily about the same thing as Iamblichus and Jowett. Cornford, even as he rejects Taylor's curious reading, shows his support for the cosmological reading of the *Timaeus* even in the choice of title for his commentary—*Plato's Cosmology*. More recently, Donald Zeyl begins his commentary with the sentence: “The *Timaeus* is Plato's creation story.”¹⁹⁵ This fairly blunt statement captures what he believes the essence of the work to be. Every orthodoxy has dissenters, nonetheless, there is a fairly settled tradition of reading the *Timaeus* this way.

This reading of the *Timaeus* is, I believe, a result of an excessive focus on what is admittedly the most compelling portion of the work: Timaeus' monologue. This seems natural, for once the monologue begins, the *Timaeus* reads much like a treatise. This approach is exemplified by Cicero, who when he translated the *Timaeus* into Latin did not even bother with the dramatic prologue. Others, such as Iamblichus did not ignore the prologue so baldly, rather, he attempted to read the prologue in terms of the monologue and thus presents the Atlantis story as an elaborate cosmological allegory. However, a focus on the monologue at the expense of the dramatic introduction inevitably distorts one's reading of the dialogue.

My approach, on the other hand, shows that attention to the dramatic context, especially that provided by Plato's meticulous characterization, pays philosophical dividends. Plato signals repeatedly what the actual aims of his work are. Socrates' initial speech on the ideal polis and right *paideia* announces the purpose of the gathering and

195 Zeyl xiii.

the work. Critias' Atlantis narrative underscores this. Finally, the characterization of Timaeus the Locrian, skilled in mathematics and statesmanship hits the point home. Plato thus gives unity to the dialogue not through advancing an explicit thesis, but through the presentation of a concrete person. He shows us, rather than tells us of the unity of virtue and knowledge, and thus the relation of cosmos and psyche by presenting us with a person who embodies it.

This sort of thematic unity for the *Timaeus* is only to be expected. For Plato, the aim of philosophy was always, as Jaeger so convincingly showed, the renewal of the polis through the means of a reform of *paideia*.¹⁹⁶ Because of this, as the *Republic* and the *Statesman* show us, philosophy is the true political art. It is the art which allows human beings to live the best life, individually, but more importantly, collectively. But the *Timaeus* shows us that an understanding of the broader order of which we are a part is essential to this art. Though politics is essentially concerned with the polis it cannot *only* be concerned with the polis. Human beings are fundamentally the same everywhere, and we are all woven into the same universe.¹⁹⁷ The effort to understand particular human problems then, inevitably leads to these broader questions.

By writing in this fashion, Plato may violate our contemporary notions of how philosophy ought to be written, but he does not violate the expectations of his audience. The Greeks of the fourth century were well accustomed to the idea that poetry, both epic and tragic, served to educate the population. Plato's philosophical project is not, as crude

¹⁹⁶ Jaeger 85, 198.

¹⁹⁷ In speaking of a universal human nature here I do not wish to suggest that Plato underestimated the role of enculturation in shaping human beings. Quite the converse is true, and it is one of the reasons that Plato puts so much stress on the right constitution of society.

readings of “quarrel of philosophy and poetry” in the *Republic* would have it devoted to producing a society bereft of any art, rather his philosophical works represent a purification of the old poetic techniques. In writing this way Plato draws his audience in to subjects which might seem dry and abstract on the surface. Through the presentation of characters such as Socrates and Timaeus, he gives his audience moral paradigms, new sorts of hero for an age when the heroic virtue of someone like Achilles might seem uncomfortably close to antisocial psychopathy. Finally, writing in this fashion allows him to present his readers with philosophical problems, without spelling out the answers. As the *Seventh Letter* makes clear, the highest truths cannot simply be communicated. One may be able to express them in simple verbal formulas, but the understanding which comes from working them out for oneself will be lacking. The direct communication of philosophical truths destroys them. With all of this in mind, we may return to the text of the dialogue.

Timaeus was initially charged by Critias with with telling the story “beginning with the origin of the world (*kosmos*) and concluding with the nature of human beings.”¹⁹⁸ This, may be combined, Critias tells us with Socrates' account of how “some of them came to have a superior education” and with Critias' own Atlantis tale to produce an image of the best society in action.¹⁹⁹ This account of the cosmos then was crafted with the end in view of serving as a home for the ideal polis described by Socrates at 17c-19a. In this ideal state a separation is effected between a class of guardians who serve the interests of

198 *Ti.* 27a.

199 *Ti.* 27b.

justice within and without the city.²⁰⁰ Each occupant of the city is to be assigned the single occupation which best suits them.²⁰¹ Further we are told, concerning women:

[T]hat their natures should be made to correspond with those of men, and that all occupations, whether having to do with war, or with other aspects of life, should be common to both men and women.²⁰²

Timaeus has performed this task well, giving us a cosmos that is the image of such a state, at least as concerns the above mentioned details. The primary divide between the kinds of living things is between immortal planetary gods, and mortals.²⁰³ The race of gods is charged with the task of the guardians. They rule over the cosmos, inspiring the obedience of the just, they give us food, cause us to grow, and take our soul into their custodianship upon our deaths.²⁰⁴ They enforce the law of the craftsman, ensuring that humans receive their proper rebirth.²⁰⁵ Humans are indeed assigned the single occupation that best suits them, it turns out, however, that there is only one occupation proper to the human being, and this is philosophy, the right organization of the body and soul through the attentive study of the order of the cosmos.²⁰⁶ Finally, the natures of men and women have indeed been made to correspond, as they are the same. The distinction between men and women is not absolute, nor is the distinction between human and animals. The soul

200 *Ti.* 17d.

201 *Ti.* 17d.

202 *Ti.* 18c.

203 *Ti.*

204 *Ti.* 41c.

205 It is unclear how the system of reincarnation works, but since the gods receive our souls upon death, it seems the gods do play a role.

206 *Ti.* 47 b-e.

is the same, merely the body differs.

Timaeus, then, has led his audience from narrow considerations of the polis to thought about the cosmos as a whole.²⁰⁷ Plato, in writing this speech has led his fourth century Athenian audience along the same path. By showing the role of human beings in the broader community living things: animal, human, and divine, Plato encourages the men of Athens to look beyond the parochial view that would have the things of Athens be superior simply because they are Athenian. Indeed, this is one thing that the Italian Timaeus can demonstrate that the Athenian Socrates cannot. True *aretē*, then, lies in understanding and as a result of this embracing ones place in the world as a whole. The traditional socialization in the ways of the polis is necessary, but not sufficient for real virtue.

The ultimate synthesis of these three elements: Timaeus' story of humanity's place in the cosmos, Socrates' account of right *paideia*, and Critias' account of Atlantis; Plato leaves as an exercise to the reader. He has laid out all of the pieces, and these three fill in for the absent fourth, their synthesis. No more needs to be said, the conjectural dialogue *Hermocrates* aside. Timaeus has discharged his task, a task that only an astronomer/statesman can, and communicated the best possible story that a human can about our role in the broader cosmos.

²⁰⁷ This is a lesson already implicit in the *Republic*, ending, as it does, with the cosmic vision of the myth of Er. In terms of theme, the *Timaeus* may be considered an expanded version of this myth.

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