# Plato on Order from Chaos

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There is a debate about the account of the origins of the cosmos given in Plato's *Timaeus*. Should we take it literally, as giving us a cosmogony? Or should it be taken metaphorically, giving an account of what the world would be like in the absence of god? This paper looks at the evidence in Plato's other works on whether there was an actual origin to the cosmos or not. This paper also looks at what Plato means by the description "demiurge" and related terms in other works, and asks how appropriate a description that is of the god of the *Timaeus* on the literal and metaphorical views. This paper concludes that there is good evidence in favour of a literal cosmogony outside the *Timaeus* and that the demiurge description is highly appropriate for god on the literal account but thoroughly inappropriate on the metaphorical account.

There has long been a debate about the nature of the account of the origins of the cosmos given in Plato's *Timaeus*. Those who favour a "literal" reading say that it gives a cosmogony. Plato believed there was a chaotic state prior to the cosmos, and the demiurge really acted on that chaos to produce a cosmos. Those who favour a "metaphorical" reading say that what Plato gives us is not a cosmogony, but an analysis of what the world would be like in the absence of god. The cosmos has always existed. Aristotle was aware of this debate and asserted a literal reading,¹ and reported that Xenocrates, the third head of the academy opted for a metaphorical reading.² Those advocating a metaphorical interpretation argue that Plato's cosmogony was for the sake of elucidation. It was meant to be taken as something for the sake of instruction, as a mathematician might use a diagram, making something easier to understand.³

One version of the metaphorical view holds that passages which appear to support a literal cosmogony can be read in non-literal ways. The Greek verb *gignomai*, often

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<sup>&</sup>lt;sup>1</sup> Aristotle, On the Heavens 279b33 ff.

It is possible that Speusippus, Plato's immediate successor, also took the metaphorical view. Plutarch specifically names Xenocrates and Crantor as early Platonists taking this view in *De. Proc. An.* 1013a, a scholium also mentions Speusippus though how much weight we can place on this scholium is open to question.

<sup>&</sup>lt;sup>3</sup> In the modern debate Taylor (1928), Cornford (1937), Cherniss (1954), Taran (1971) and Baltes (1996) have defended the metaphorical position, while Vlastos (1939, 1965), Hackforth (1959), Sorabji (1983), Reale (1997), and Vallejo (1997) have defended a literal view.

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rendered as "to come into being", can mean to come into existence, or can mean simply "to change" (to come to be x). So passages using *gignomai* constructions should not be read as asserting the cosmos came into existence, but that the cosmos is subject to change.<sup>4</sup> A second version of the metaphorical view accepts that certain passages appear to support a literal view, but argues that what Plato says and what he means may be different. The debate has largely considered evidence internal to the *Timaeus*, in particular whether Plato's description of the supposed pre-cosmic chaos is coherent. It has only ventured outside the *Timaeus* to try to show that if there is chaotic motion prior to the cosmos, this would contradict Plato's position on motion in other dialogues.<sup>5</sup>

What I want to do in this paper is examine this issue in a rather broader context. Firstly, what evidence is there about Plato's attitude to cosmogony away from the *Timaeus*? What evidence is there about the linked issues of the origins of life and of the elements? Where Plato is critical of the cosmogony of presocratic thinkers, what is the nature of his criticism? What alternatives does he offer? Secondly, Plato refers to the god of the *Timaeus* as a demiurge, but elsewhere he often talks of the work of *démiourgoi*, human craftsman. What sort of work is it that they do and how does that relate to Plato's views on order and chaos, and to coming into being? How appropriate is it for the *Timaeus* god to be described as a demiurge on the literal and metaphorical interpretations?

To establish what it is that demiurges do in Plato, let us begin with a passage from the *Gorgias*. Socrates says:<sup>7</sup>

The good man who speaks for the best, does not say things at random but looks to some purpose, just as all other demiurges (*démiourgoi*), looking to their own work, do not pick out and apply materials at random, but act so as to give a certain form to what is worked upon. Take for example, if you will, painters, builders and shipwrights, and all other demiurges, any of them you wish, how they bring everything together into a certain order, and make each part to be suited to each other, until they have been brought into an organised and well-ordered object. The other demiurges and those we were just talking about, who are concerned with the body, trainers and doctors, bring good order and organisation to the body... organisation and good order make a house serviceable, disorder makes it wretched (*Gorgias* 503e–504a).

<sup>&</sup>lt;sup>4</sup> Many possible meanings for *gignomai* were distinguished in this context, see Philoponus *Against Proclus on the Eternity of the Kosmos* 146.

See Vlastos (1939, 1965), Cherniss (1954), Taran (1971) and Gregory (2007) on these issues. The issue is if Plato believes that the soul is the source of all motion (as he appears to do outside the *Timaeus*), what of the supposed chaotic motion prior to the generation of soul? One literalist reply is that soul is the source of orderly motion and disorderly motion ha other sources.

I have argued elsewhere that Plato has a well worked out strategy which he applies consistently to origins questions (cosmos, life, elements) and that he treats these three issues a being very closely related. See Gregory (2007) Ch. 9.

Omitting Callicles' replies.

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So demiurges induce order, and they do so by the assembly of well chosen or well fashioned parts. Implicit in the *Gorgias* passage, but explicit in the following passage from the *Sophist* is the idea that demiurges are productive craftsmen and produce something that was not there beforehand. The Stranger says:<sup>8</sup>

Farming, and the tending of all mortal bodies, and that which concerns construction and shaping, which we call implements, or imitation, all these may correctly be called by a single name... When someone brings anything into existence which did not previously exist ( $m\acute{e}$ ... on) the bringer is the producer, and that which is brought we say is produced... all those which we just now mentioned have this ability ( $Sophist\ 219a-c$ ).

This not only establishes that demiurges are productive craftsmen, but also that they bring their products into existence from non-existence. There can be no ambiguity here as the construction is *mé on... eis ousian*. This approach to the work of demiurges is neither unique nor surprising in Plato.<sup>9</sup> Later in the *Sophist*, the Stranger tells us:<sup>10</sup>

Firstly, there are two parts to production... the godly and the human... production, if we remember the beginning of our account, we said was any power to bring into being something which did not previously exist ( $m\acute{e}$ ... ousin)... All mortal animals, and indeed anything which grows above the ground from seeds or roots, and soulless bodies put together in the earth, fusible or not fusible, should we say that these things came into existence, previously having not existed (ouk onta), in some other way than through god's craftsmanship (theou  $d\acute{e}miourgountos$ )? Or should we accept the common belief... That nature herself generates them through some spontaneous means without intelligence? Or are they generated with the reason and divine knowledge that comes from god? (Sophist 265b).

The Stranger also goes on to say:

We and all the other animals, and those from which natural things are constituted, fire and water and their brothers, we know are all the children and productions of god (*Sophist* 266b).

As Plato has unambiguously given us god's demiurgic activity as bringing something non-existent into existence, we cannot re-read this passage as we might if it used only *gignomai* constructions. If we are to take this metaphorically, Plato must be taken to mean something other than what he says here. Why should we accept that though? There is nothing problematic with what is said here. There is no mention of chaos, with issues of the coherence of that chaos or relations to other works to drive a metaphorical interpretation.

The *Politicus* is significant in that it gives us several things simultaneously. There is clear evidence that the cosmos is generated out of chaos by a demiourgos. There is

<sup>&</sup>lt;sup>8</sup> Omitting Theaetetus' replies.

<sup>&</sup>lt;sup>9</sup> See e.g. *Symposium* 205b: "As you know, production/poetry (*poiésis*) is more than one thing. If anything comes into existence from non-existence (*mé ontos*), the entire cause of this is production/ poetry, such that the works of all skills are production/ poetry and the demiurges are all producers/ poets".

<sup>&</sup>lt;sup>10</sup> Omitting Theaetetus' replies.

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an analysis of what the cosmos might be like in the absence of this demiourgos. There is an unproblematic account of chaos. Starting at *Politicus* 269a we have the tale of the reversing cosmos. 269c is entirely clear that there is an era when god guides the cosmos, and another when he relinquishes control. This is restated at 270a. *Politicus* 269c tells us that the cosmos is "a living being endowed with intelligence by he who constructed it in the beginning (*kat' archas*)." 270a–272d gives a comparison of the cosmos and human life in each of the two eras. 272e then considers what happens when there is the change from god being in control to his giving up that control. Not only does god relinquish control at this stage, all the subservient deities do as well. We then find that:

In the beginning the cosmos remembered the teaching of its demiourgos and father (*démiuorgou kai patros*) most accurately, though this eventually dulled. The reason for this was the physical element in its constitution, which had been in it from the earliest state, and partook of great disorder before the universe came to be in its present ordered condition (*Politicus* 273b).

So this cosmos came into being from a primordial chaos, by the action of its demiourgos and father. The tale then continues:

When the world nurtures within itself living things under the guidance of the helmsman, it produces little evil and much good. However, when it becomes separated from him, it fares best during the time immediately after the release, but as time proceeds and it grows forgetful, the old condition of disorder gains sway more and more, and towards the conclusion of time little good and much of its opposite flourishes, and there is danger of the destruction of the world and those in it. At this moment God, the orderer of the world, perceives that it is in trouble, and being concerned that it should not be storm driven by confusion and broken up into an endless sea of unlikeness, he takes his old place at the rudder, and reverses the sickness and destruction of the first period when the world moved itself, and he orders and sets it right again, forming it deathless and ageless (*Politicus* 273c–e).

Some important conclusions come out of this. First, we can hardly treat this *Politicus* passage metaphorically as a whole. It gives us a clear and straightforward analysis of what the cosmos would be like if god did not pay close attention to it as well as some clear material on cosmogony. The material about how the cosmos came into being from a chaos cannot then be part of a metaphor. Secondly, when Plato wishes to write about what the cosmos would be like in the absence of god, he can do so in a perfectly straightforward manner. If he can do so, why does he need to resort to the supposed metaphor of creation in the *Timaeus*? Thirdly, in a situation which cannot be metaphorical, Plato writes about a pre-cosmic chaos in a clear and coherent manner. The *Republic* too seems to take a straightforward line on the origin of the heavens:

Won't the true astronomer be similarly persuaded when he looks up at the movements of the stars? He will hold that these works have been put together (*sustésasthai*) as beautifully as possible, constructed (*sunestanai*) in this way by the demiourgos of the heavens (*Republic* 530a).

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Plato should not use *sunestanai* if he wishes to deny cosmogony. The root verb here, *sunistémi*, means to bring together. Equally problematic is the fact that in the immediately preceding passage, at 529e1, the heavens are likened to a diagram drawn by Daedelus or some other demiourgos, implying productive activity by the demiurge of the heavens. As with the *Sophist* passage, this seems to be a straightforward claim about origins, with no consideration of chaos. Also significant, later on at *Republic* 596b ff., is that when a demiourgos (such as a carpenter) produces something (such as a bed) he has his mental eye on the form of a bed. When the demiurge is creating the cosmos in the *Timaeus*, he is looking at an unchanging model in order to produce a good cosmos (*Timaeus* 28b–29a).

The *Laws* also gives us a very important passage in relation to cosmogony, giving us an attack on what looks like the cosmogony of Leucippus and Democritus:<sup>11</sup>

Let me put it more clearly. Fire, water, earth, and air all exist due to nature and chance, they say, and none to skill, and the bodies which come after these, earth, sun, moon, and stars, came into being because of these entirely soulless entities. Each being moved by chance, according to the power each has, they somehow fell together in a fitting and harmonious manner, hot with cold or dry with moist or hard with soft, all of the forced blendings happening by the mixing of opposites according to chance. In this way and by these means the heavens and all that pertains to them have been begotten (*gegennékenai*) and all of the animals and plants, all of the seasons having been created from these things, not by intelligence, they say, nor by some god nor some skill, but as we say, through nature and chance (*Laws* 889b).

Plato's alternative to the "nature and chance" approach to cosmogony is not to stress that cosmogony never happened, but to say that everything has been "begotten" by god. In Plato "to beget" carries its usual meaning of to father or produce children. The *Laws* passage is also important in that one option for the metaphorical view would be to date the *Timaeus* late (so after the *Politicus* and *Sophist*) and argue that Plato changes or clarifies his view to a metaphorical one in the *Timaeus*. If the *Laws* is later than the *Timaeus*, as is generally assumed, this option is not available.

Finally, this is the opening passage from the *Critias*. Timaeus is speaking and having completed his account of the cosmos in the final part of the *Timaeus*, he is about to hand over to *Critias*:

I am glad, Socrates, like someone resting after a great journey, now that I have blessed relief from the ordeal of my account. Though in deed (*ergói*) he was created at some time long ago, I offer my prayer to the god who was just now created in my speech, that he will himself preserve for us what we have said that has been well said, and if we have unwittingly said anything discordant, he will impose a fitting penalty (*Critias* 106ab).

The god created in *Timaeus*' speech (but in fact created long ago) is the world soul. The deeds/ words contrast strongly suggest a creative action to produce this god, who

See Diogenes Laertius IX, 31, Simplicius *Physics* 327, 24 and 327, 330, 14 on atomist cosmogony and Sextus Empiricus *Against the Mathematicians* VII 116–118 on the like to like principle.

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was not only produced long ago but at some point in time (pot') long ago. On the metaphorical view, genesis is an ongoing process whereby god keeps the cosmos in order. It is then entirely inappropriate to single out a point in time long ago when genesis happened, especially in conjunction with the deeds/ words contrast. It is then difficult to re-read this passage as not supporting the literal view. Is it part of some elaborate, sustained metaphor where Plato says one thing but means something else? Against that, one might say that Timaeus has finished his account, and is now speaking, as it were, "off the record", and not as part of some grandiose metaphor. We are now in a different dialogue with different concerns. Finally, one might ask: Is it really appropriate to have prayer to a god about the creation of that god as part of a metaphor that says that the creation of that god did not happen?

Outside the *Timaeus* then there is good evidence that Plato believed in a literal cosmogony. Plato offers the alternatives of a cosmos produced by "nature and chance" or by the active production of god. He clearly opts for the latter in all situations. At no stage does he offer no cosmogony as an option, nor does he even discuss this as a possibility. His criticism of atomist cosmogony is not that it is mistaken to postulate a cosmogony, but that the active intervention of god is required to generate a cosmos. We cannot re-read these passages outside of the *Timaeus* as allowing a metaphorical view. As there are several passages, all presenting a single coherent literal view, we cannot undermine this evidence by suggesting that Plato is talking offhand in these passages. Nor, given the *Laws* passage, can we argue that there is a change of position in the *Timaeus*.

How appropriate is to call the god of the *Timaeus* a demiourgos on the literal and metaphorical accounts? On the literal account, this would seem to be highly appropriate. Outside the Timaeus, demiurges select and fashion parts, and bring them into an ordered whole. They do this as a productive act, bringing something into existence, an action which can be likened to fatherhood. In the Timaeus, god selects and fashions the two basic types of triangle (53b ff.), the elements of earth, water, air and fire are constructed out of these and god's arrangement of these constitutes the cosmos, as god brings order out of disorder (30a, and especially 69c). It is not just "demiourgos" which is an appropriate description. At 28c, 33b, and 68e in critical cosmogonical passages, god is referred to as a tektainomenos, literally a carpenter, more generally a maker or someone who fits things together.<sup>12</sup> At 28c god is *poiétén kai patera*, "maker and father" of the cosmos. A maker, following Sophist 219a and Symposium 205b is someone who generates something which did not previously exist. At Timaeus 37d god plans to make (poiésai) a moving image of eternity by ordering (diakosmón) the heavens and making (poei) time. 13 The father part of the 28c description is significant on its own as indicating productive activity, and is also important in relation to Sophist 266b where humans, animals and the elements are all described as the children of

<sup>&</sup>lt;sup>12</sup> At 91a the demigods create (*etekténanto*) sexual desire.

<sup>&</sup>lt;sup>13</sup> Cf. 38c where god makes (*poiésas*) the bodies of the planets.

god and *Laws* 889b where god begets the heavens. At 41a god is a begetter (*gennésas*), and in his own words is the demiourgos and father of these works (*egó demiourgos patér te ergón*). In relation to this, god is called demiurge and father in a clearly non-metaphorical context *Politicus* 273b. At 42e the demigods who create human beings are the children (*paides*) of the father (*patros*), and when they create humans they are imitating their own demiourgos. <sup>14</sup> The use of *sunistémi* proliferates in the *Timaeus*. There are uses in critical cosmogonical passages at 30b, 48a, 69c.

With the metaphorical account, there is a problem. To call the *Timaeus* god a demiurge is inappropriate, if that is meant to be a true description of this god. One thing I have tried to do in this paper is show just how inappropriate that description is on the metaphorical account. We simply cannot re-read that description in favour of the metaphorical view. There is a very clear, consistent and well attested conception of what demiurges do outside the *Timaeus*. On the literal interpretation there is a perfect match with god's cosmogonic activity and that conception of demiurgic activity. If a god so frequently described as a demiurge, a tektainomenos, a father, a begetter, and a maker does not engage in any creative activity, that generates serious issues of the consistency of those terms between the Timaeus and other works. Far more so than the supposed problems with the origins of motion that arise by taking Plato's description of chaos in the *Timaeus* literally. Another difficulty for the metaphorical interpretation, though I do not have the space to develop it in depth, is this. An important theme in the *Timaeus* and in Plato's work generally is that personally and collectively, we should not just maintain order but generate new order. So we order our minds, bodies, lives and cities for the better. We are to use god and the cosmos as models for our ordering and to attempt to become like god. 15 Do those important analogies of god and cosmos with personal and political order work anything like as well if god merely maintains rather than creates order?

Could the description of god as demiurge, etc., be part of a grand metaphor where Plato says one thing and means another? What would motivate such a strategy though when Plato in the *Politicus* can describe what the universe would be like in the absence of god quite straightforwardly? How appropriate is it within such a strategy to describe god so clearly and frequently as a productive, creative craftsman? If we accept that Plato says one thing but means quite another here what does that mean for the interpretation of Plato generally? One reason behind going through all the passages relating to cosmogony outside the *Timaeus* is to show that if we take the *Timaeus* cosmogony metaphorically, that too is seriously at variance with what Plato has to say in other works, again more so than the problems with pre-cosmic motion related to the literal view. The metaphorical interpretation of the *Timaeus*' cosmogony generates more problems than it solves.

<sup>&</sup>lt;sup>14</sup> Cf. 71d where our creators recall their father's (patros) instructions.

<sup>&</sup>lt;sup>15</sup> See e.g. *Timaeus* 47c, 90d.

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