

SELF-MOTION AND COGNITION: PLATO'S THEORY OF THE SOUL

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ABSTRACT: I argue that Plato believes that the soul must be both the principle of motion and the subject of cognition because it moves things specifically by means of its thoughts. I begin by arguing that the soul moves things by means of such acts as examination and deliberation and that this view is developed in response to Anaxagoras. I then argue that every kind of soul enjoys a kind of cognition, with even plant souls having a form of Aristotelian discrimination (*krisis*), and that there is therefore no completely unintelligent, evil soul in the cosmos that can explain disorderly motions; as a result, the soul is not the principle of all motion but only motion in the cosmos after it has been ordered by the Demiurge.

“Soul” is said in many ways across its eleven-hundred-and-forty-three uses in the Platonic corpus. It is the principle of both life and self-motion. It is the seat of cognition. It is also the bearer of moral properties. While there has been a lot of attention in recent years given to Plato’s *moral* psychology and the tripartite theory of soul, it is not clear at all just what the soul is or how its various roles and identities fit with each other. Scholars have, in

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fact, charged Plato's theory of the soul with incoherence.¹ For he frequently oscillates between different conceptions of the soul. The *Phaedo* is the principal example: in one argument for the immortality of the soul, the soul is the principle of life; in another, it is the mind.

We can see this feature of the soul elsewhere. For example, in *Republic* I, Plato writes²:

Is there any function of the soul that you could not accomplish with anything else, such as taking care of something (*epimeleisthai*), ruling, and deliberating, and other such things? Could we correctly assign these things to anything besides the soul, and say that they are characteristic (*idia*) of it?

No, to nothing else.

What about living? Will we deny that this is a function of the soul?

That absolutely is.³

He is moving almost reflexively from the soul as a reasoning thing to the soul as a principle of life. Making sense of these different strands of thought is an ancient worry: Plutarch, for instance, points to a debate between Crantor and his followers, on the one hand, who thought that cognition and judgment were the chief functions of the soul, and Xenocrates, on the other hand, who thought self-motion was its principal operation.⁴ Further,

¹ Here are some scholars who level this accusation: Broadie (2001, 301–2) says that “readers of the *Phaedo* sometimes take Plato to task for confusing soul as mind or that which thinks, with soul as that which animates the body” and argues that the unity of the Platonic soul is what the *Phaedo* is trying to show. Frede (1978, 38) laments that “as to the exact nature of the soul we are left somehow in the dark by Plato in the *Phaedo* and also in *Republic* X” and believes that the problem is not solvable. Solmsen (1955, 154–55) finds such a narrow conception of the soul in the dialogues that he thinks Plato has “no room for” many of the soul’s functions and they are treated “rather like strangers at the gate than children of the house.” Long (2005, 173) charges Plato’s psychology with “incoherence” but does try to save it by saying that souls are *persons* and personhood provides unity. Trabattoni (2007, 307–8) says of the attempt to find in the dialogues a unified theory of the soul: “il risultato di questo metodo, tuttavia, somiglia pochissimo ad una *theory*, e molto più a una farraginoso dossografia, irta di incongruenze e di contraddizioni.” Crombie (1962, 301) complains that there are multiple “forces which pull upon the word *psuchē* as Plato employs it.” Fronterotta (2014) is concerned with the same problem.

² Unless stated otherwise, all translations here are my own. I have consulted the translations listed in the references: for the Presocratics, see Barnes (1979) and Dumont (1988); for Plato, see Burnet (1922), Cooper (1999), Gallop (1975), Hackforth (1952), Mayhew (2008), and Rowe (1986; 1993); for Aristotle, see Aristotle (2016), Barnes (1984), and Ross (1951; 1956; 1961).

³ *Republic* I 353d.

⁴ See Plutarch (1976, 1012–13).

when Aristotle reports where his predecessors stood on the soul, he divides them into “those who regarded the ensouled in relation to motion” and “those who regarded the ensouled in relation to knowledge and perception of the things that are” (*De Anima* I.2 404b7–9). This reflects the debate that Plutarch observed: two different ways of thinking about the soul.

Here, I understand cognition tentatively as the capacity for *nous* and *doxa*. Plant souls will complicate this picture below. Moreover, understanding why the soul has cognition will, in fact, go a long way to seeing why the soul is the subject of other, familiar psychological phenomena such as love and hatred. Occasionally I shall use the word “thought,” but I have in mind something weaker and more expansive than what “thought” or “intelligence” often connotes, namely, the long list of activities identified in the *Laws* passage (896e–897a) to which we shall turn shortly: wish, examination, deliberation, and so on. These are the motions with which the soul moves things.⁵

Along these lines, I argue that to be the sort of mover Plato thinks that the soul is, it must have cognition.⁶ I then argue that every kind of soul cognizes, although in the case of plant souls, Plato means something so weak and thin that it is akin to what Aristotle calls discrimination (*krisis*). I conclude by arguing that there is no evil, completely unintelligent soul in the cosmos and that the soul is, in fact, a principle of motion in the cosmos only after the cosmos has been ordered by the Demiurge. The possibility of an evil soul is raised most prominently in *Laws* X, where Plato asks which soul is in charge of Heaven: “one wise and full of virtue, or one that possesses neither” (*to phronimon kai aretēs pleres ē to medetera kektēmenon*) (897c)⁷? Whether even plants have *to phronimon* (“an intelligent part”) is treated in section 3. The debate comes down to whether every soul has *to phronimon*,

⁵ The capaciousness of this category (such that it includes, as we shall see, belief and deliberation) is due to the relationship between theoretical and practical reason in Plato, which I discuss toward the end of section 1.

⁶ Johansen (2004, 138ff) distinguishes between so-called kinetic and cognitive readings of the soul in the *Timaeus*, after pointing out the same debate between Crantor and Xenocrates that I have above. He argues that there is no need to choose between these different readings because the “point of the composition of the soul is to show how the soul moves when it thinks and thinks when it moves.” In a sense, this paper expands upon this interpretation (and focuses much more on the *Laws* than on the *Timaeus*'s account of the soul's composition). However, I also argue that the soul's cognition is a *necessary condition* for the sort of motion for which the soul is responsible; from the point of view of interpreting the soul's composition (which Johansen 2004 is interested in), we might agree that cognition and motion are equally important, but if it were not for the soul's cognitive capacities in general, it would not be capable of being a source of order in the cosmos, which, I argue, is key.

⁷ “Evil and completely unintelligent” is how I describe the latter soul.

and I answer in the affirmative. This article concerns features that are common to *every* soul.

This view enables us to better appreciate the importance of Plato's psychology in the history of thought. Plato is innovating when he unites the soul as the principle of cognition with its status as the principle of life; for there appears to be nobody before him who united them.⁸ In fact, the soul hardly appears even in Plato's own (so-called) early dialogues, which some scholars have explained by saying that Plato did not at the time know how to unite the soul's aspects.⁹ As we shall see, the *Laws* furnishes us with the clearest statement of how to unite these aspects, but it is too hasty to conclude that Plato did not have at least the makings of the answer before this point. The *Phaedo's* oscillation between different conceptions of the soul suggests that he did. No matter when he solved the problem, we should see this as a watershed moment in ancient psychology: the moment when two longstanding aspects of *psuchē* were united.¹⁰

1. SELF-MOTION AND COGNITION

The starting point of a solution to the problem is to see that when Plato describes the soul as the source of motion, he does not mean motion in an unqualified sense. The motions in question require cognition. It is for this reason that the soul must also be a knower. Consider that in the *Phaedrus*, Plato initially presents the soul as the source of mere motion, and while this might at first seem to include both unintelligent and intelligent motions, he later clarifies what he means: "all soul takes care of the soulless" (246b). Taking-care (*epimeleisthai*) presumably requires some intelligence, but the

⁸ The only apparent exception is a passage from Antiphon, in which the jury is asked to punish a murderer by depriving him of the "*psuchē* that planned the crime" (*Tetralogies* 14a7; translation in Claus 1981, 141 n. 3). I agree with Claus (1981) that we should not overstate the rationality involved in the criminal act: the murderer in question was, in fact, drunk, and thus his behavior was not *that* rational.

⁹ Socrates in the *Crito* alludes to the soul when he mentions the part of us that has justice or injustice inside it, but he does not name it (47e–48a). Perhaps this passage and the uncertainty expressed in the *Apology* regarding the afterlife support the interpretation that Plato had to work out his psychology over his career. Claus (1981) says so; an even earlier statement of this approach to the soul is from Rohde (1921, 266–67), who said that "es scheint, dass die höchste Vorstellung von Wesen und Würde, Herkunft und über alles Zeitmaass hinaus sich in die Ewigkeit erstreckender Bestimmung der seele Plato erst gewann, als die grosse Wendung seiner Philosophie sich vollendete."

¹⁰ We continue to see this united conception of the soul throughout the history of philosophy, even if some of the underlying Platonic foundational details change. See, for instance, Solmsen (1971) on Aristotle's argument that living things are not self-movers at all.

passage in *Laws* X where Plato describes exactly how the soul moves the cosmos is decisive:

Soul drives (*agei*) all things in heaven, on Earth, and in the sea, by means of its own motions, which go by the names of wish, examination, taking-care, deliberation, true and false belief, joy, grief, courage, fear, love, hatred, and all the prime-working (*protourgoi*) motions akin to these that take over (*paralambanousai*) the secondary-working motions of bodies, such as increase, decrease, separation, combination, and those that follow these, such as heat, cold, roughness, smoothness, white, black, bitter, and sweet, all of which the soul uses, when it both cooperates with divine understanding [*nou*] and guides everything, as a true deity, happily and correctly, or when it pairs with the lack of understanding [*anoia(i)*], it brings about the opposite.¹¹

This passage is not exclusively about the world-soul. For false belief is attributed to soul here, and it is not possible for the world-soul to get anything wrong.¹² Also, that no particular soul is referenced here is indicated by the absence of any article before *psuchē*: he is speaking generally about the function of soul as such. Moreover, there is no sense in the *Timaeus* that the world-soul moves *everything*, but this passage is about how soul drives *all things* (*panta*). Our own souls move their local corner of the cosmos through the motions listed there.¹³

The difficulty of identifying *which* soul Plato is talking about is shared by the *Phaedrus*'s passage concerning soul taking care of the soulless (246b). There, too, no article is present: *pasa psuchē*. On this basis, it seems that *Plato is talking about a common feature of souls*: namely, they move things (in the *Laws*) and take care of things (in the *Phaedrus*).¹⁴ For we are not given any reason to think that any given soul moves *everything* in the *Laws*, and indeed, we cannot attribute every motion from the *Laws* passage, such as false belief, to

¹¹ *Laws* X 896e–897b.

¹² The *Timaeus* cannot explain why the world-soul's rationality would sometimes fail. Its creation from the purest mixture seems to preclude that, and moreover, Plato characterizes the world-soul's intelligent life as *ceaseless* (*apausatos*), whereas it seems that having a false belief would require some kind of cessation of intelligence (36e). Further, there is no reason to think that Plato imagines the world-soul as capable of love, fear, and the other phenomena attributed to soul here.

¹³ However, I am not claiming that the passage refers to *only* human souls. Carone (1994, 283) mistakenly thinks that if we do not believe Plato is talking about the world-soul, then he is talking about only human souls. She explains that "if it is *just* the human souls that Plato is speaking of here, it is hard to understand why he says of them that only they 'rule everything in heaven, earth and sea' (896e) or, as Plato will say afterwards, are 'in control of heaven and earth and the whole revolution' (897b)."

¹⁴ See Blyth (1997, 186) for a defense of this interpretation of the *Phaedrus*'s psychology. He argues that the *Phaedrus*' argument from self-motion concerns not any particular soul (or kind of soul) but instead "some common aspect of all living things." See also Bett (1986).

the world-soul in any case. The reader of the *Phaedrus* comes to the *Laws* already knowing that taking-care was one way that the soul moved the world, but Plato thinks that the *Laws*' much richer set of mental phenomena, including taking-care, is required to explain why the world is the way that it is. We should take seriously that the list of prime-working motions is incomplete: there are further unnamed motions that are also responsible for the world's order. These motions are responsible for the world's order specifically by *taking over* the motions of bodies and guiding them by means of *nous* toward the right end. This discussion of *taking over* (*paralambanein*) is the specification of a mechanism by which the soul promotes the desired outcome.

This helps us see why Plato thinks that the soul is the subject of so many disparate activities. Corcilius (2015, 24) discusses what he calls Plato's "psychological" conception of the soul: the picture of the soul as the subject of "various mental actions and affections." He believes that Plato "at no point argues for his psychological conception of the soul." However, it seems that *Laws* X 896e–897a is the crux of such an argument. Plato thinks that we could not explain why the world is ordered as it is, which is the *explicandum* of *Laws* X, without attributing to the soul a rich set of activities, including even joy, false beliefs, and love.

Furthermore, unintelligent motions are caused by the soul only indirectly. In the first place, the soul is responsible only for activities that require some kind of cognitive life. It is important that Plato says that these are the soul's *own* (*autēs*) motions. He is stressing that while the soul is indirectly responsible for the other motions, it is the direct cause of only the so-called "prime-working" ones. The final account, then, is that the soul moves things with its thoughts, generally speaking, and then these motions cause things to increase or decrease, and so on, in accordance with the soul's designs, and then bodies acquire the properties Plato mentioned, such as heat and roughness, and more. Dillon (2009, 349) says that nowhere in the corpus does Plato specify an "influence, mechanism or device" by which the soul moves bodies, and even when we consider the *Laws* in particular, although the soul is the source of motion, we never learn by what means it is able to move things. However, the *Laws* is designed to answer this question: it is by means of the souls' intelligent motions that bodies are moved.

Plato's decision to combine the principle of self-motion and cognition turns on two related Platonic motifs. The first is that, construed roughly and broadly, the person with the relevant knowledge is the appropriate one to oversee some activity. This is present throughout the whole corpus: for example, at *Crito* 48a, where Socrates says we should listen only to those who understand justice, not the ignorant many. Its strongest expression is

in Plato's political philosophy: specifically, consider his belief that only someone with knowledge will have a model in his or her soul to look to when ruling (e.g., *Republic* VI 500c–d). The strong conclusion is that an ignorant person “cannot establish conventions about what is beautiful, just, and good here, if they need to be established, and protect and preserve them” (*Republic* VI 484d). This concerns our present subject, because when Plato considers how orderly the world is, he infers that it was ordered by someone with knowledge (*Laws* X 897b–d).¹⁵ The inference relies on an implicit premise that resembles 484d: *only* someone with knowledge can be productive of the sort of order that we see in the cosmos. Therefore, the entities responsible for it are intelligent. Moreover, 897b–d makes it more evident that souls have *circular motion* in particular. Since circular motion is the motion of *nous*, and souls are movers by means of intelligent activities, then souls are movers by means of circular motions.

The second motif here explains why souls can cognize the Forms in particular. Theoretical wisdom is required to carry out even ostensibly completely practical activities such as deliberation.¹⁶ Deliberating well requires knowledge of the Forms. It should not be lost on us that deliberation is listed as one of the motions by which the soul moves the world in the *Laws*. Consider again the *Republic*, where he says that it is only after contemplating, and becoming like, the Forms that the philosopher can rule the ideal city (VI 500–1). *Timaeus* 28b–29b has a complicated argument to eliminate the possibility that the Demiurge looked at anything other than the Forms when crafting the world.¹⁷ The *Statesman* divides all knowledge into two kinds: one is practical and the other theoretical (*gnōstikē*) (258e). The theoretical knowledge again divides into two kinds, one of which is authoritative (*epitaktikon*) (260b). Those with authoritative knowledge give orders to others

¹⁵ “Orderliness” is a broad term that picks up on several related ideas from *Laws* X. There, the motions that govern the cosmos are said to be uniform (*hōsautōs*) and regular (*kata ta auta*) (898b). Plato contrasts them with motions from an entirely unintelligent source, which move in an unbalanced (*manikōs*) and disorganized (*ataktōs*) way (897d). This notion of orderliness is not teleological; however, later in the *Laws* X, and throughout the *Timaeus*, Plato does argue that the motions governing the cosmos are directed toward a certain end.

¹⁶ While Plato does see theoretical and practical knowledge as distinct kinds, one supports the other. Olfert (2017, 26) finds this connection between the two even in dialogues where the Forms are absent: for example, in the *Protagoras*, she gleans that “the art of measurement does not only motivate our actions, and does not merely determine what it is correct (best, most pleasant) for us to do, or what it is true that we should do. It also directs us to act knowledgeably and thereby to let knowledge and truth rule our lives.” This picture of theoretical reason explains why Plato imbues the soul with it, even though the explanatory role of soul cosmologically is a productive one.

¹⁷ Johansen (2014) is a helpful study of this argument.

and *do* things with their knowledge that those with the other sort, judgment-making knowledge, do not.¹⁸ We should think of how Plato views the motions of the soul in *Laws X* as *productive* of combination, separation, and so on. He even describes the former as *prime-working*.

2. PLATO AND HIS PREDECESSORS

This picture lets us appreciate Plato's engagement with his predecessors. I shall illustrate this with only Anaxagoras, for the sake of brevity. Socrates in the *Phaedo* explains what he finds appealing about Anaxagoras's view of *nous*: *nous* is "what arranges and is the cause of all things" (97c). However, Anaxagoras lets Socrates down when he neither makes any use of *nous* in his account nor gives it any role in the management of things; instead, air, water, and other unintelligent things have control (98b–c). While there are many dimensions of Plato's criticism of Anaxagoras, including what a *cause* is, we should understand this as at least the charge that there is an insufficient connection between *nous*'s noetic activities and its status as a principle of motion. Anaxagoras does see *nous* as "self-ruling" and as having "knowledge about all things" (fr. 12).¹⁹ Yet, when he begins to describe how *nous* "initiates motion," he describes only a rotational movement that divides and separates things off (fr. 13).²⁰

Anaxagoras says that *nous* "controls" (*kratei*) everything that "has life" (*ekhei psychēn*) (fr. 12). He seems to always cash out the idea of *controlling* in terms of a rotational movement. This view is similar to Plato's.²¹ In both

¹⁸ Plato also says that the statesman can occupy his place as a ruler in virtue of his *understanding* (*sunesis*) (*Statesman* 259c). As well, it is in virtue of *the reasoning part's wisdom* and ability to have forethought on behalf of the other parts of the soul that it is fit to rule (*Republic IV* 441e). This idea was clearly important to Plato.

¹⁹ All translations of Anaxagoras are my own, using the Greek text provided by Kirk, Raven, and Schofield (1983, 362–63).

²⁰ There is a debate over whether *nous* merely begins the motion or whether it sustains it eternally. Rhodes (2017, 14ff) is the most recent defender of the latter view; Betegh (2004, 209) and Curd (2008, 236) defend the former. As for how the motion is caused, Rhodes (2017, 8) argues that Anaxagoras is committed to the principle that motion is caused whenever two unlike things meet. *Nous*, being pure and unmixed, is different enough from the mixture of everything else that motion is guaranteed by the meeting of the two.

²¹ Indeed, Aristotle notices the similarity too (*De Anima* I.2 404a25–27). Carter (2019, 172) argues that Aristotle objects to Plato's representation of Anaxagoras: on his reading, Aristotle presents Anaxagoras's *nous* as an unmoved mover, causing beauty and order (despite Plato's claims in the *Phaedo* that Anaxagoras does this insufficiently), and that it is Plato himself who has failed to identify why it is best for the cosmos to be as it is (*DA* 1.3 407b9–11). Carter (2019) also interestingly argues that Aristotle believes that Anaxagoras failed to distinguish between *nous* and soul, which, as discussed in the main text shortly, I believe is the opposite of Plato's reception of him: Anaxagoras has not tightly enough connected *nous* and soul.

cases, the first motion is circular, and in both cases, the source of that motion is responsible for only one kind of motion, which then initiates other kinds. For Plato, soul at first creates the prime-working motions, which generate then the secondary-working motions, which in turn generate heat, cold, and so on. Given this, Plato is justifiably disappointed that Anaxagoras made no use of *nous* as such at all (*Phaedo* 98b–c). At *Laws* 896e, he writes that soul moves all things by means of its *own* motion, and those motions are intelligent ones. We should take this as stressing a connection between intelligence, the initiation of motion, and the soul. This is in contrast to Anaxagoras's view, on which the rotation might as well have been initiated by anything at all: there is no reason why it should have been caused by *nous* in particular. Anaxagoras's theories are such that *nous* does no explanatory work, despite the promises made in the early part of his book, or, at any rate, that is the substance of Plato's criticism, rectified later in his own cosmology.²²

Further, it seems to matter greatly to Plato that *nous* does not merely control the soul but that the soul is the only thing in which *nous* can come to be. This view is repeated in the *Philebus* (30c), *Timaeus* (30b), and *Sophist* (249a). The *Timaeus* passage is particularly telling, for it contains the explanation of why the world is ensouled in the first place: if the world did not have a soul, *nous* could not have come to be inside it. The Demiurge knows that the world needs *nous* in order to be as good as it can be, but the world-body is not able to contain it; therefore, the Demiurge creates the world-soul (30a–c). This is another way of getting at Plato's complaint that Anaxagoras did not tightly connect *nous* and the soul.²³ In Anaxagoras's fragments, we do find, perhaps at most, an anticipation of the central feature of Plato's theory, an identity between thought and a kind of motion, but what we do not find is the soul as the thing which unites them.

²² I qualify this thought thus because it is difficult to prove that Anaxagoras really *did* exclusively rely on mechanistic explanations. We catch glimpses of a more involved cosmic *nous* attributed to Anaxagoras at *Cratylus* 413c. Skemp (1942, 33–34) argues that Anaxagoras and his followers had gained a bad reputation in Athens, seen in the *Apology* (26c–d), and this reception is behind the view that he “[resorted] to mechanistic explanations alone.” See Carter (2019) for Aristotle's readings of Anaxagoras, which differ greatly from the *Phaedo*'s. If this is right, then we still see Plato constructing his own theories of the soul and *nous*, albeit not against what Anaxagoras really believed.

²³ However, I do not think that, for Plato, *nous* is required to exist in a soul if it is to exist at all. When *nous* comes to be, it can come to be only in a soul, but it can *exist* outside a soul. See Menn (1995) for a defense.

3. THE DIFFERENT KINDS OF SOUL

When we think of the unity of Plato's theory of the soul, there is not just the unity of the soul's different functions to be considered, but also the question of what constitutes the unity among the different kinds of souls that exist. Here, I do not mean the *parts* of a soul, which Plato does sometimes call *eidē*, but instead the world-soul, human and animal souls, and plant souls. Specifically, I shall argue that every kind of soul enjoys a form of cognition, although the world-soul and plant souls enjoy it differently from human souls.

Plato is not the first person to think that the world has a soul. Anaximenes, for example, said that "just as our soul, which is air, dominates us, so too breath and air surround the whole world" (DK 13B2).²⁴ In the same way that air, our soul, relates to our body, so too does it relate to the world. There is some evidence, moreover, that Plato sees himself as working in a world-soul tradition. Socrates asks Hermogenes in the *Cratylus*: "Do you not believe Anaxagoras that *nous* and soul order and maintain the nature of all other things?" (400a). The activity of ordering and maintaining described here is attributed by Plato ultimately to the world-soul. Karfik (2014) argues that there is similar evidence pertaining to Empedocles. He argues that when Plato says that the Demiurge bestowed love (*philia*) on the world's body (*Timaeus* 32b–c), he is referring to Empedocles. In the *Statesman*, when Plato rejects the view that opposing motions in the cosmos can be explained by a pair of gods whose thoughts are contrary to other (270a), Karfik (2014) also discerns a reference to Empedocles's pair of love and strife.

Plato is, however, critical of this tradition. This *Statesman* passage is a rejection of the Empedoclean theory, even if Plato does think that *philia* has a place in the *Timaeus*. We have considered above Plato's criticism of Anaxagoras. Moreover, if Plato were aware of Anaximenes's theory that the psychic substance, air, stands in the same relation to the cosmos that it does to humans, then it would be this claim that he would target most forcefully. For he thinks that there are meaningful differences between the world-soul and human souls. There is, as Gerson (1990, 77) points out, the obvious fact that human souls cannot govern the universe. Plato thinks that the world-soul is deprived of every motion except for circular motion (*Timaeus* 34a). The world-soul cognizes sensible objects differently from how we do. For the world-soul can indeed have a true grasp of sensible objects, but Plato signals that it is not capable of *sensation*: he uses deliberately the phrase *peri*

²⁴ This translation is by Laks and Most (2016).

to *aisthēton* (“concerning a sensible object”) instead of *aisthēsis* (37b).²⁵ The world, of course, has no sensory organs, which is another indication that its experience of sensation must be different from ours (33c).

However, Plato believes that the world is ensouled for the same sorts of reasons that he thinks human beings have souls; the same kinds of phenomena need to be explained. When the Demiurge weaves the soul into the body of the world, it then begins its “intelligent life” (*emphrōn bios*) (36e). Plato has in mind the rotation of the cosmos around its axis, which goes through the center of the Earth. We know that there is a world-soul because the whole cosmos moves in an orderly way, and orderly self-motion cannot be explained in any other way. It matters that the only thing that *nous* can come to be in is a soul, which figures heavily into the earlier parts of the *Timaeus*'s story of the world's creation (e.g., 30b). In fact, Plato thinks that the world has *nous* because of its regular, circular motions around the Earth. No motion besides circular self-motion is available to the world-soul. Humans and animals have cognition too, but theirs is different from the world's.

The difference is reflected in the composition of human and animal souls. They are made of the same ingredients as the world-soul—Being, the Same, and the Difference—but this mixture is less pure (*akēratos*) (41d). It is not clear which differences between the world and humans this explains. I assume that it explains, at least, why the world-soul's cognition is more efficacious than ours: specifically, the world's thought can move the whole world. Human thought accomplishes much less than that. Since Plato thinks that animals are reincarnated humans, they share the same kinds of soul; the world-soul is excluded from the cycle of reincarnation since its soul is so far from being like ours, whereas animals presumably do not have an active rational kind of soul.²⁶ As well, of course, there is only one world-body, and the world-soul never leaves it, which rules out its exclusion from the cycle of reincarnation.

The lower gods in the *Timaeus* pay close attention to creating a body for us that, as much as possible, protects our reason; so, perhaps the reason why, say, shellfish and birds do not have an active reason is that their body simply is not right for it. As for differences between the world and humans, Brisson (1994, 416) thinks that the purity is the *only* difference between the world-soul and human souls, but this is not obvious. For example, humans

²⁵ Reydam-Schils (1997, 263) also notes that since there is nothing outside the world-body (32c–33b; 34b), it could not get knowledge of sensible objects from outside it.

²⁶ This recalls a criticism of the theory of reincarnation in *De Anima*: the theory implies that any soul can, in principle, end up in any body; yet, Aristotle thinks that bodies and souls are perfectly fitted to each other, and so a Pythagorean, for example, seems to be saying something as incoherent as “carpentry could be clothed in flutes” (L3 407b20–26).

are often irrational, but the world is not.²⁷ Plato *does* provide an account of the origin of human irrationality, but he locates it in sensation (43a–44d). Sensation violently disrupts the rotation of the circles of the same and different, and it renders us irrational until we begin to do astronomy and philosophy to restore order in the soul. This could never happen to the world-soul, simply because it lacks sense organs and thus cognizes sensible objects differently. It might be that the lower grade of purity in our souls makes us especially vulnerable to these disruptions, but it is never clear just *what* the impurities consist in or are meant to explain.²⁸

It is required for reincarnation that the souls in animal bodies are the same in kind as those in human bodies. Carpenter (2008) has argued persuasively that this means that, in principle, there are few differences between animals and human beings; at a minimum, their life projects can be described similarly as attempts to restore their souls' natural orders. Yet, just as the world-soul is excluded from the cycle of reincarnation, so too are plant souls excluded.²⁹ This reflects an important feature of plant souls: they are deprived of three cognitive capacities. Here is how Plato describes the inner lives of plants: “[the type of soul that they have] does not share in opinion (*doxa*), reasoning (*logismos*), or *nous*, but it does share in both pleasant and painful sensation, with desires” (77b). However, the *Timaeus* earlier says that sensation occurs when a disturbance passes through the sense organs and reaches to *phronimon* (64b).³⁰ Sometimes the phrase is translated

²⁷ Cornford (1937, 209–10) argues, in fact, that the world-soul *is* partly irrational, for reasons we shall consider in the following section.

²⁸ Robinson (1970, 85) adopts this view: “[the mixture of the ingredients] of the human soul is less pure in the sense, perhaps, that its rational judgments can be clouded and perverted by that irrational element with which it is inevitably associated while living an embodied existence.”

²⁹ Exactly how far down the cycle of reincarnation extends is unclear. In the *Timaeus*, the lowest level is occupied by shellfish (92b–c). Meanwhile, in the *Phaedo*, it seems that some people are reincarnated as bees or ants (82b). Either way, in no dialogue does Plato suggest that the cycle extends as far down as plants; given how different plant souls are from other souls, as we shall see shortly, there are good reasons for excluding them. As for how high up the cycle extends, Broadie (2016, 161–62) argues that for a world, “metempsychosis to a new body is impossible” because the world’s body will never die. That is right, but we must also mention there is no other world that could be incarnated (33a).

³⁰ Sensation is also attributed to the mortal kinds of soul, so we might have the same question about them too (cf. *Timaeus* 69d). This fact about the mortal kinds is important in the discussion of the liver and the way that the kinds of soul in a human interact with each other. For instance, at *Tim* 70e–71e, Plato describes images that appear on the liver that the appetites (apparently) perceive and respond to with fear. It is hard to know how to make sense of the appetites perceiving things. See Lorenz (2011, 256), who defends Plato by saying that there is a fire internal to our body that can detect these sorts of changes on the surface of the liver.

in this context as “the center of consciousness” or “the organ of intelligence,” but at a minimum, it means something like *the intelligent part*.³¹ Plato usually uses the term to refer to the rational kind of soul (e.g., *Republic* VI 530c, IX 586d, X 604e; *Laws* VIII 837c, X 897b), but there is no way that plants can have the same reason as humans.³²

The cognition enjoyed by plants is just enough to let them do the two tasks Plato attributes to them: have sensation and have desires. He lacks the vocabulary to precisely name this idea, but we shall see that it resembles Aristotelian discrimination (*krisis*). Plants are responsive to what is good for them about their environment: they grow in good environments and wilt in bad ones. Think of a plant whose leaves stretch and turn toward sunlight and whose roots grow to reach water. A sensitivity to what is good or bad could easily be thought to underlie this behavior, especially to someone who believes that plants have sensations and desires. What is even more remarkable is that plants are able to respond *successfully* to what is good for them—they get it right.

So, there are two considerations to accommodate when identifying what plant cognition is like. The first is that plants successfully respond to what is good for them. The second is that Plato attributes to them desire and sensation in the same dialogue where sensation is explained as involving *to phronimon*. Aristotelian *discrimination* fits well here: plants can discriminate between what is good for them and bad for them, and then respond accordingly. The part of plant souls that corresponds to *to phronimon* in other souls is responsible for this activity. Aristotle describes discrimination as an activity that is of perceptible objects and that moves us depending on what is discriminated; for instance, the sweet moves us differently from the bitter (*De Anima* III.2 427a1–3). Moreover, discriminations are neither true nor false in the propositional sense, which fits with Plato's view that plant souls lack *doxa*.

It does seem that Plato's theory of sensation requires thinking that plants *do* contain *to phronimon*, but I suspect that this is true only in a metaphorical, imprecise sense. The imprecision is required by the fluidity and imprecision of Plato's own cognitive vocabulary. A focus on the explanandum—successful responsiveness to what is good—makes it otiose to attribute to plants any form of cognition more robust than the weak, minimal Aristotelian *krisis*. There is just no further explanatory power added by saying that plants have *to phronimon* in the full sense that humans do, which preserves its

³¹ See Brisson (1997, 159–60) for a brief discussion of *to phronimon* in sensation.

³² This, after all, is how *phronēsis* is described in the *Phaedo* (79d).

etymological connection to *phronēsis*.³³ That possibility is made more implausible by the explicit statement that plant souls lack *nous*, *doxa*, and *logismos*. This *krisis*, which Plato can only gesture at with his vocabulary, is responsible for the orderly, well-oriented motions of plants, and that is the chief takeaway as far as this study is concerned: plant souls produce orderly motions in virtue of their form of cognition, as weak as it is.³⁴ We might find that, in practice, animal cognition functions the same way. I have argued above that animals have the same kind of soul as humans but that their bodies account for the differences in cognition; since their *nous* is dormant or otherwise inactive, they might rely on the same kind of cognition as plants. If so, then only human sensation is characterized by the functioning of *to phronimon*, but animals and plants still differ in the sense that plants do not even have *to phronimon*, whereas animals have it but cannot use it on account of their bodies.

In sum, every soul has cognition. Plant souls have it as the *krisis* that makes their flourishing possible: responsiveness to what is good and bad for them that explains why plant leaves turn toward the sunlight, for example. The world-soul has intelligence that underlies cosmological facts. Meanwhile, human and animal souls have the same kind of intelligence as the world-soul; humans, at any rate, are capable of the same array of mental activities,

³³ Consider Carpenter's (2010, 296) argument: "*if to phronimon* retains its connection to *phronēsis*, so that its proper place is among the 'thinking'-terms, with *nous*, *epistēmē*, *dianoian*, and so on; and *if* the process of a bodily change causing a sensation to arise goes via this *phronimon*; and *if* plants have sensation—*then*, plants have a *phronimon*, and so are intelligent, in some sense."

³⁴ It might be tempting to explain plant behavior differently. We might imagine that plants inherit the world-soul's intelligence, or that plants just straightforwardly belong to the world-body and so are ensouled in some way along with it. This view is taken by Carpenter (2010, 300), who argues that plant intelligence is derivative: plants do not have their own intelligence; specifically, "their sensation does indeed occur, like all sensation, in virtue of some intelligence—but it is the intelligence of the world-soul, and not their own." There are a few considerations that count against this proposal. Firstly, plants are invented by the lower gods at an entirely different, much later step in the cosmogony than the world-soul and world-body (77a). (In fact, plants are invented by the lower gods, whereas the world is invented by the Demiurge.) Secondly, each plant pursues its own good and competes with other plants in order to flourish; this is not the behavior of something being directed by a hivemind. Thirdly, if plants were parasitic on the world-soul, then it would not be clear why Plato bothers to introduce the concept of plant souls at all. Lastly, the proposal overstates the cosmological function of the world-soul. Plato infers that the world has a soul for one reason: it moves itself. Specifically, it rotates on an axis that passes through the Earth. After it has been created by the Demiurge, it nearly drops out of the *Timaeus* completely, only reappearing later on (e.g., 89e–90d) as the model our souls should aspire to be like. For this reason, it is giving too much responsibility to the world-soul to be the source of intelligence in other things, when, in fact, it is the source of motion in the world (and its own cognition exists just to facilitate the orderliness of that motion).

such as deliberation and examination, although ours are less efficacious. The possibility of a completely unintelligent soul is the subject of the next section. The view that there exists a completely evil soul is an ancient and venerable one, which is worth considering since it possibly undermines my interpretation.³⁵

4. THE SOUL IS NOT THE CAUSE OF DISORDERLY MOTION

The existence of a completely unintelligent soul is hypothesized in *Laws* X (897ff) after the discussants conclude that *some* soul is in charge of the cosmos; they then wonder whether it is a soul with virtue and intelligence or an unintelligent, evil soul. The discussants agree in the end that the soul that drives the cosmos is intelligent since the cosmos is so well-ordered. However, it is an open and urgent question just how to explain the existence of disorderly motions. Plutarch, in order to answer this question, in *On the Generation of the Soul in Plato's Timaeus* says that there really is an evil soul (cf. 1016C–D). To a certain extent, we can answer the same question as Plutarch without taking his step: Plato says in *Laws* X that since the soul is the cause of all things (*tōn pantōn*), it must be “the cause of the good, the bad, the beautiful, the ugly, the just, and the unjust, and every pair of opposites” (896d). It makes sense for human souls to be, say, imperfectly just and to, therefore, be responsible for imperfectly orderly things.

However, saying that human souls are responsible for imperfectly orderly things does not solve the whole of the problem. For there exist multiple passages in the corpus where Plato describes a *completely* disorderly motion that no soul could possibly explain. For example, the receptacle changes properties with no order whatsoever: “it moves back and forth inconsistently while oscillating” (*Timaeus* 52e). Cornford (1937, 209) explains this by pointing to some irrationality in the world-soul.³⁶ This explanation has two shortcomings. One is that there is no way that the world-soul could produce something *entirely* disorderly. The second is that these motions are *pre-cosmic*

³⁵ I do not have much to say here about the mortal kinds of soul, but since the argument throughout this article has stressed that it is by means of the soul's intelligence that it acts as a mover, I point to Karfik (2005), who argues that the mortal kinds of soul are motions initiated by the rational kind of soul. Specifically, Karfik (2005, 214) says: “to put the whole as simply and as briefly as possible, the ‘mortal kind’ of soul or the ‘mortal parts’ of it are but specific movements of specific tissues [in the human body], both arising from the immortal soul and acting upon it. There is no mortal soul apart from the body of a living being nor is there any substrate of it other than the bodily tissues of an organism.”

³⁶ Morrow (1950, 162–63) similarly claims that “the disorderly motions upon which intelligence works are due to the irrational parts of the world soul.”

in the sense that they are happening before the Demiurge has even discovered matter, so to speak: they exist “before the world was organized and came to be out of them” (53a). In fact, God responds to the disorderly motions by adding number to them (53b). So, there is no way that the world-soul could be responsible for this, even if somehow irrationality were present in it. The difficult explicandum is not the imperfectly orderly motion we observe nowadays, but the thoroughly disorderly motion that no human soul *could* be responsible for. Plato does not think that such motion exists anymore, but it existed only pre-cosmically.

We return to Plutarch’s suggestion that there is a distinct evil soul that is responsible for this motion.³⁷ In his view, the evil soul is not created by the Demiurge but instead predates his ordering of the cosmos.³⁸ The world-soul is the result of the Demiurge ordering the evil soul (1014B–E). However, Plato does not describe the creation of the world-soul this way at all: there is no sense that it comes to be out of a pre-existing soul. Nor is there an ungenerated evil god.³⁹ For there is yet another dialogue where disorderly motions are discussed, namely, the *Statesman*; there, Plato does rule out the possibility that an evil god or soul is responsible.⁴⁰ Sometimes God moves the universe in one direction circularly, but at other times, he lets it go, and it revolves backward spontaneously (*automaton*) (269c–d). Plato rejects the following explanations explicitly: “we must not say that the universe turns itself, nor in general that it is turned by god in two opposed rotations, nor that some two gods who think in a way opposed to each other turn the cosmos” (269e–270a). Plato thinks that there is one god responsible for the motions of the world.

The conclusion I draw is that the soul is not the source of all motion, despite the claims in the *Phaedrus* and *Laws* that it is. In fact, the soul is just

³⁷ Plutarch (1976) himself: “unsubject to generation is said of the soul that before the generation of the universe keeps all things in disorderly and jangling motion” (see *On the Generation of the Soul in Plato’s Timaeus*, 1016C).

³⁸ There is nothing to recommend the view that the evil soul is created by the Demiurge. It seems impossible, since it would have to have been the first thing created by the Demiurge to make sense of the order of events. Plus, there is no discernible reason why the Demiurge would decide to create a purely evil soul, given that he wanted everything to be as much like himself as possible (29e). Further, disorderly motion in the cosmos is exactly what the Demiurge set out to correct, so his creative acts would be the pre-emptive undoing of the product of something he himself created (30a).

³⁹ It is important to bear in mind the textual support against this possibility, for frequently scholars leave the door open to dualism in Plato’s system. For example, Carone (1994, 286) says that “[Plato] does not dismiss the existence of a kind of evil soul as such,” but instead has argued just that the amount of order in the universe is decisive evidence that the evil soul does not drive the world.

⁴⁰ The presence of the disorderly motions in other dialogues rules out that they are somehow a mythical feature of *Timaeus*’s account, peculiar to that dialogue.

the source of all motion in the ordered world *qua* orderly. The data above are impossible to square with the claim that there is a soul responsible even for any completely disorderly motion. Moreover, we should bring to bear the fruits of the earlier parts of this paper: soul moves things with its thoughts. It is hard to see how any of Plato's statements about the sorts of motions soul is responsible for could fit with completely disorderly motions. The view that the soul is not the source of all motion has been off the table since Cherniss (1944; 1954) attacked it, after Vlastos (1939) defended something like it.⁴¹ Everyone who wants to avoid claiming that Plato contradicts himself must abandon some part of the text. Cherniss (1954, 28) explains the disorderly motions as an unintended consequence of the ordering of the world: "demiurgic action again indirectly sets up in other phenomena another series of motions that are neither intelligent nor purposive, but accidental, random, and erratic." Yet, the text of the *Timaeus* reads that the disorderly motions predate any desire on God's part to order things. Further, the text of the *Statesman* reads that there is no other ungenerated god who is responsible for the backward motions. Lastly, Cherniss' account does not even explain the phenomena, for surely if the disorderly motions were even indirectly caused by God, then they would not be *entirely* disorderly, but that is how they are described.

It is easier to abandon the claim that the soul is the principle of *all* motion for a range of reasons. It is normal for both English- and Greek-speakers to make a universally quantified claim over an implicitly limited domain. This is happening in the contexts of the *Phaedrus* and the *Laws*. In the former, we are told first that the soul is the source of motion (245d), but then when the reader learns how the soul does this, we are told that soul takes care of all things (246b), and that Zeus, for example, who either is or has a soul, takes care of and orders (*diakosmeō*) all things. We have already discussed *Laws* 896e–897a, where souls move things by means of intelligent activities.⁴² In both cases, it seems that Plato is naturally limiting the scope

⁴¹ Cherniss (1944, 362) says that "Vlastos, seeking agreement between the *Laws* and a literal interpretation of the *Timaeus*, has to insist . . . that where in the former Plato calls soul the principle of all motion he is not to be understood as meaning literally 'all' (!)."

⁴² I follow Vlastos (1939, 82) when he says: "forget the *Timaios* altogether for a moment. How much could Plato mean when he says that the soul is the cause of all becoming and perishing? At its face-value this asserts that the soul is itself the cause of the instability of becoming; that apart from soul reality would be untroubled by transience. But this is grotesquely unPlatonic. When Plato does ask himself, 'Is soul more akin to being or becoming?', he can only answer, 'It is in every way more like being' (*Phaidon* 79e). The one thing he cannot mean in the *Laws* is that soul is the source of Heraclitean flux." More weight is added to Vlastos's position when we recall that soul's cognitive capacities are its kinetic capacities; the affinity with being, the Forms, makes it able to function as a mover.

of the claim that the soul is the source of all motions.⁴³ In addition, Aristotle reports that Plato only “sometimes [*eniotē*]” says that the soul is the source of motion (*Metaphysics* 12.6 1072a2), lending more credibility to the view that it is so only in the ordered world.⁴⁴

I cannot decisively settle here the question of what causes these pre-cosmic disorderly motions, if not the soul. However, the text suggests an answer: in some way, it is matter or necessity (*anankē*).⁴⁵ The *Statesman* says that the backward motion was “inborn [*emphuton*] in the world from necessity,” as opposed to being caused by God or gods (269d). A lot of time has been spent in this paper spelling out the activities by which the soul moves the cosmos; for there to be another source of motion seems to require an account of how that second source could move things, especially when necessity is devoid of any intelligence. Yet, no such explanation seems forthcoming from Plato’s texts, and there is a good reason for that. If necessity had a regular, coherent way to cause motion, its motions would be regular and coherent, too; however, the chaos is so disorderly that it does not even have any stable properties *at all*. Perhaps this is why Plato does not bother to speculate as to how necessity causes the disorderly motions.⁴⁶

⁴³ Mohr (1980, 42) argues against the view here on the grounds that “nowhere does Plato explicitly state the ἀρχὴ κινήσεως doctrine applies only to the ordered world. And yet one would expect that if Plato had meant to limit the scope of the doctrine, he would have made some mention of it.” In contrast, I am arguing that the scope of the doctrine is limited implicitly by the contexts of the *Phaedrus* and *Laws* and think it is natural that when someone says “all,” he or she does not mean *all*.

⁴⁴ Consult Cherniss (1944) and Gerson (2014) for why Cherniss would not accept Aristotle’s testimony as evidence.

⁴⁵ Many scholars describe a *material* principle of evil, usually picking up on a brief mention of the bodily element (*to sōmatoides*) of the world in the *Statesman*’s myth (273b–c), such as Herter (1957) and Nightingale (1996). Sesemann (, 174) argues that there is a commitment to a material principle of evil that Plato has inherited from the Pythagoreans. However, I follow Wood (2009, 362–79) in thinking that there is nothing strictly *evil* about the bodily and that the real problem is the *disorder* (which is not bodily at all). See Mason (2006) for a study of what necessity is in the *Timaeus*.

⁴⁶ An anonymous reviewer for *The Southern Journal of Philosophy* raises a difficult point. Since the receptacle is not moved by an evil soul, it is self-moving, but that which is self-moving is eternal (cf. *Phaedrus* 245c–246a and Blyth 1997), from which it follows that the receptacle is eternal (and moves eternally, since its motions are caused by itself, which means that it is always moving). I do take it that the receptacle’s motions exist even now—but not that its motions are perfectly disorderly, as they were pre-cosmically. The *Timaeus*’s descriptions of the way that *nous* persuades necessity implies that the motions of necessity have been guided or directed by *nous*; indeed, Plato speaks this way at 46e when he says that those things that produce disorderly effects without *nous* go on to produce what is beautiful and good when not deserted by it. This idea recurs at the central passage of *Laws* X, when Plato describes the motions of soul (such as wish and examination) as taking over (*paralambanein*) and guiding the motions of bodies (896e–897b). For this reason, I conclude that the motions of the receptacle are preserved yet transformed by *nous* and that they do exist eternally, as we would expect from a self-mover.

5. CONCLUSION: THE SOUL'S COSMIC RESPONSIBILITY

Both the *Statesman* and *Timaeus* passages above describe the world when God is absent from it. In the latter, God “took over the visible, which was not at rest but was in discordant and disorderly motion” (30a), and this chaos “exists apart from God” in its natural state (53b).⁴⁷ This helps us see the way that soul features in this picture and in Plato’s cosmology overall, because while God is the principal cause of order in the cosmos, he eventually retires and leaves the generated souls in charge.⁴⁸ God’s absence would leave Plato with a world of pure indefiniteness, if there were no souls. We might be tempted to point to the *Philebus*’s view that objects are compounds of limit and the unlimited. God adds limit to things. At *Timaeus* 53b, he resolves the pre-cosmic chaos by adding numbers to it; beforehand, everything was *alogōs* and *ametriōs*. God’s act gives things intelligible properties.

God’s retirement from ordering the world leaves the lower gods and then souls with this job. The retirement is indicated after he has assigned tasks to the lower gods and is said to have “proceeded to stay at home in his customary attitude (*en tō[i] heatou kata tropon ēthei*)” (42e). This is why in the *Laws* it is the soul that moves things with its thought, which then creates other motions, which in turn give objects their properties, such as bitter, cold, and so on. Since bestowing properties on things is a matter of adding numbers or definiteness to them, then it becomes all the clearer why the soul would have to be capable of some intelligence in order to accomplish this, and this is why Plato envisions the soul as both a knower and a mover. This is something even *we* humans do, as *Laws* X 896e–897a says, through our cognition as well as our love, fear, hatred, and so on. That this is our *cosmic* responsibility is what the Athenian tries to impress on the atheist: the god, identified here as our king (*hēmōn ho basileus*), “devised where to place each of the parts [of the cosmos] such that virtue would win and vice would lose most easily and completely throughout the whole universe. For this purpose he has arranged which sorts of positions, in which sorts of regions, should be assigned to which soul based on its character; but he left the causes of the coming-to-be of any sort of character to the will of each of us [*taīs boulēsesin hekastōn hēmōn*]” (904b–c). God has a purpose for the whole cosmos

⁴⁷ Brisson (2003, 200–1) discusses this point, arguing specifically that Plato is alleging that his predecessors focused exclusively on necessity, such that this “is the picture of the sensible universe to which his predecessors’ explanations should lead. There, only material changes are taken into consideration, with intention being left to one side.”

⁴⁸ Broadie (2016, 169–70) discusses the “retirement-motif” too.

that we are a part of. We are one of the parts that have been arranged such that virtue wins, and God has left to our wills how things play out exactly.

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