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The Soul's Tomb: Plato on the Body as the Cause of Psychic Disorders

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Abstract: I argue that, according to Plato, the body is the sole cause of psychic disorders. This view is expressed at *Timaeus* 86b in an ambiguous sentence that has been widely misunderstood by translators and commentators. The goal of this article is to offer a new understanding of Plato's text and view. In the first section, I argue that although the body is the result of the gods' best efforts, their sub-optimal materials meant that the soul is constantly vulnerable to the body's influences. In the second section, I argue that every psychic disorder is a disruption of the motions of the inner psychic circles by the body; moreover, I defend my translation of 86b. In the final section, I argue that the goal of education is to restore the circles to their original orbits, and I disarm a possible objection that bad education is also a cause of psychic disorder.

Keywords: Plato, *Timaeus*, body, soul, vice

In Plato's texts we find two approaches to the body.¹ The first is the line that the body is the soul's tomb and prison.² The second is the view that the body is the soul's tool.³ The *Timaeus* provides a natural-philosophical explanation of both approaches, although it is usually thought that its psychology undermines the theories of preceding dialogues.⁴

¹ All translations of Plato here are my own (and are based on Burnet 1922), and I have consulted the translations in the bibliography, including Lamb 1925, Jowett 1875, Zeyl 2000, Plato 1999, Waterfield and Gregory 2009, Pigeaud 1981, and Brisson 1992.

² For example, see *Phaedo* 82e, *Cratylus* 400c, *Phaedrus* 250c, and *Gorgias* 493a.

³ An instance of this that will be taken up in the first section below is the *Timaeus'* claim that the body is the vehicle of the soul (44e). *Alcibades* 128a–131a states that the body is the tool of the soul in general.

⁴ The view of Johansen 2004, 137, that the *Phaedo's* line that 'the body disrupts the proper workings of the soul' has been revised is precisely what this article is arguing *against*. See Bobonich 2003, 293–331, for an argument that the *Timaeus'* psychology generally undermines Plato's earlier theories. However, there are indeed some changes in the psychologies of the different dialogues, which I discuss below, but I shall argue that the *Timaeus* does maintain that the body causes all psychic disorders.

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This article concerns the soul-body relationship in the *Timaeus* and argues that the body is the cause of all psychic disorders. In the first section, I argue that the body was created by the gods to serve as the soul's vehicle, but the inferior materials at their disposal means that the body endangers the motions of reason. Next, I argue that Plato thinks that the body is the sole cause of psychic disorders: an ambiguous sentence at 86b has been consistently mistranslated into English and obscures his meaning. I conclude by considering whether bad education is also a cause of psychic disorders.

We will ultimately see that the *Timaeus* offers a medical analysis of vice: an explanation couched in terms of bile, phlegm, and the dangers of nutrition and sensation. I will stress that, despite appearances to the contrary, Plato is not walking back claims from other dialogues but is, in fact, further unpacking them: important ideas from the *Phaedo* and *Republic*, left merely suggestive in those works, are filled out in much greater detail here. Perhaps most interesting is that the *Timaeus*' medical analysis is not paired with a medical *solution*: philosophy cannot protect the soul from the body's dangers, but it does correct the damage.

1 The Construction of the Human Body

The human body was created by the lower gods as a vehicle (*okhēma*) for the rational soul: there was a moment in creation when the rational soul was encased inside the head and could not get over bumps or out of trenches, and so the lower gods furnished it with a body (44e; 69c). The world, on the other hand, needed to move only in a circular motion, for which its limbless body was sufficient (34a). The gods were responding to a unique problem posed by our souls, and they looked to the Demiurge's creation to inspire a solution: the human body is an imitation of the vehicle that accompanies the rational soul in its disembodied state (41e). Our body is an imperfect imitation: whereas the Demiurge invented the astral vehicle in order to tour newly created souls around the natures of all things, the lower gods created the body in order to facilitate locomotion here on Earth.⁵

The chief imperfection of our body, introduced because its creators were imperfect, is the gradual depletion of its matter. Specifically, the gods gathered water, Earth, air, and fire from the world-body but did not put them together using the same 'indissoluble' bonds that hold fast the polyhedrons that themselves compose the so-called elements; the lower gods used rivets so small that they were invisible to hold the human body together (43a). Fire and air wear these rivets

⁵ See Karfik 2012, 180, for a discussion of this function.

down.⁶ The situation was once much worse than it is today: fire and air used to beat at us from every direction, until the gods created plants to provide us with some protection (77a–c).⁷ The eventual dissolution of the body's constitution is inevitable, but Plato makes an important distinction between natural death and death by disease, the latter of which we can forestall in many cases by proper exercise and nutrition.

The digestive system in general exists to reverse this process of depletion. Digestion consists in the tetrahedra that make up our internal fire cutting up the food we eat and turning it into blood. By the principle of like-is-attracted-to-like, this cut-up food 'fills back up the part that had just then been emptied' (81b).⁸ This process is more efficient when we are younger: the tetrahedra inside us are stronger when they are younger, and they can more easily overcome the 'older and weaker' constituents of our food (81c–d). The tetrahedra get worn down, and we die because our bodies can no longer keep up with the rate of decay. The gods have worked themselves into a corner: we need the body in order to help us get around, but the body needs a near-constant stream of nutrition to outstrip the decay caused by the lower gods' inferior materials, for which the solution is the invention of the digestive system. The danger is that the digestive system is accompanied by the appetitive kind of soul, which Plato describes as 'the kind of soul that has appetites for food, drink, and everything else it needs due to the nature of the body' (70d). We needed to have an appetitive kind of soul to have desires for food and drink. If we did not have these desires, then whenever our body was running low on matter, we would need food but not be hungry. So, humans are altogether better off with these desires, but the appetites are unruly.

The gods foresaw that we would be 'intemperate when it came to drink and food' and that we would eat much more than was appropriate or necessary (73e). For this reason, they coiled the intestines: this prevents the nourishment from being carried through the body so quickly that there would almost immediately be another urge to eat. The gods were deeply concerned that humanity, with uncoiled intestines, would not be capable of philosophy or of obeying the 'divine within us'

⁶ Remember that the world-body is created by the Demiurge, not the lower gods. Bodies do not *have* to be imperfect; ours is, just because the lower gods did not have access to the same bindings that the Demiurge did.

⁷ It is unclear whether the *pneuma* here really is air; see Archer-Hind 1888, 284, and Taylor 1928, 541, for more.

⁸ Plato likens this motion to the motion of everything in the cosmos in general: things tend to move towards what they are like. The motions of our digestive system are 'forced (*anankazetai*) to imitate the cosmos' motion (*phora*)' (81b). The point is that our digestive system distributes nourishment to the correct parts of the body without being directed by any particular intelligent agent.

(73a). Of course, we see here the motifs familiar to us from other Platonic dialogues, such as the *Republic*: that the appetites are unwieldy and that they compete with the rational kind of soul. Here Plato is adding that the gods foresaw this and tried their best to make it easier to resist the temptations of food and drink. One such effort was the coiling of the intestine; much more enigmatic is the functioning of the liver. The gods know that the appetites will not obey reason, for they do not understand it at all, and even if the appetitive kind were aware of reason's orders, it would not care about them (71a). The gods then 'plotted against' the appetites by designing the liver (71a–b). The rational kind of soul can rein in the appetites by transmitting images (*eidōla*) to the liver.⁹ Reason can use the 'power (*dunamis*)' of 'its thoughts' to, say, frighten the appetitive kind by shriveling up the liver, causing it pain; the same power can be used to be more gentle with the liver (71b).¹⁰ The gods establish all this with a view to the Demiurge's order that they 'make our

⁹ The idea that there are images on or in the liver is hard to understand. Karfik 2005, 211, treats the question as irresolvable, given how little *Timaeus* says about it. Moss 2011, 280, characterizes the images on the liver as 'inner images' and aligns them with the *Philebus*' talk of images in our mind when we are, say, imagining ourselves as owning a hoard of gold (40a). However, the images on the liver cannot be inside our mind, for Plato says that the role of the spleen is to be the liver's 'napkin' and clean off the images on it (72c). This does not make sense if there is no literal physiological change in the liver. The content of the images is the subject of a lot of controversy. Stalley 1996, 369, thinks that the images display punishments that reason is threatening the appetites with. Lorenz 2011, 245–246, says that the images are of the things that the appetites are enticed by, but also allows that some are 'visual illustrations that correspond to the accounts formulated by the soul's rational part, including, for instance, accounts that amount to threats or warnings.' I suspect that this is reading too much into a simile Plato uses: 'the power of the thoughts sent from reason strike fear in the appetites, just as in a mirror that receives impressions and returns visible images (*eidōla*)' (71b). In my view, the talk about *eidōla* is figurative: there is no image of a hamburger on the liver when a person craves one. Instead, the force of reason's thoughts expresses itself as physiological changes in the liver: it will cause the liver to shrivel or even block it off from receiving the nourishment it needs. However, the denial that there are *pictures* on the liver does not mean there is no visible change, for Plato is clear that the liver can change colors, and one way of restraining the appetites is changing to some repulsive, bilious color. How this could be effective at all is mysterious, for it is not as if the appetitive kind of soul has eyes of its own. Lorenz 2011, 256, defends Plato by saying that there is a fire internal to our body that can detect these sorts of changes. However, the *Timaeus* says that sensation requires an intelligent part in the would-be perceiver, which the appetites lack (64b); plus, it is unclear how the appetites could be aware of something that the person is not aware of. Perhaps Karfik is right that these questions cannot be adequately resolved, or perhaps Plato thought that any visible changes in the liver were superfluous by-products, whereas reason's desired effects are, in fact, carried out by the mere (painful) shriveling-up. For more on how reason interacts with appetites in the *Timaeus*, see Bobonich 2003, 316–326, and 2010, and Kamtekar 2010.

¹⁰ Bear in mind the *Phaedrus*' chariot image, according to which the bad horse, representing the appetites, cannot respond to verbal commands (due to its deafness) and can be controlled by whip just *barely*. We have to treat this horse violently.

species as excellent (*ariston*) as possible' (71d). The qualification 'as possible' (*eis dunamin*) is a reminder that the lower gods are working under constraints here: they *know* the difficulties that human beings will encounter as a result of the system in place that shores up the defects in the construction of the human body.

It is for the same good reason, broadly speaking, that the gods invented the spirited kind of soul. Reason needs a way to communicate and enforce its orders with the rest of the body, not just the liver, and the gods invent spirit as the ally of reason.¹¹ When reason learns that some part of the body is acting inappropriately, that part is ordered to stop: this order is transmitted from reason to the heart, which then boils over with blood, and then the bloodstream carries this message to the relevant extremity. This system is a response to the unruliness of our body: reason needs a way to tell it what to do and end its disobedience.¹² Moreover, it itself is not even a perfect system. Its functioning, being not itself rational (although it is closer to reason than the appetites are), is so dangerous to the activity of reason that the gods invented the neck as a buffer between the different kinds of soul (69e).¹³ Plus, the heart can pound, and blood boil, because of fire, which means the chest gets quite hot: the lungs were invented to cool the heart and were placed around it like padding (70c–d). Every solution breeds a new problem, and it is never clear just how many steps behind the lower gods are, especially because they are incapable of furnishing a perfect solution.

The mortal kinds of soul do serve us.¹⁴ Spirit, for instance, helps enforce reason's commands, and the unwieldy appetites can at least fear reason and take

11 Plato bifurcates the mortal kinds of soul: spirit is 'naturally better,' whereas the appetites are 'naturally worse' (69e). This bifurcation reflects the ability of spirit to carry out reason's orders, whereas the appetites cannot. There is a further question, namely, whether spirit can *understand* reason. Wilburn 2014, 630ff, argues that it cannot. Brennan 2011, 123, Archer-Hind 1888, 262–263, Gill 1997, 268–270, and Karfik 2005, 210–211, argue that it can; Moss 2011, 275, Irwin 1995, 211–212, and Reeve 1988, 136–137 are sympathetic. (Consider again the *Phaedrus*' chariot image: the better horse does not need to be whipped and can be led by our verbal commands (253d–e).)

12 The explanation here is the longer version of the *Republic*'s claim that spirit is the ally of reason (440b). Wilburn 2014 unpacks the way that the *Timaeus* analyzes the claim.

13 While Plato *does* mean this as a genuine explanation of the body, there is a joke here too. The Greek word for neck is *isthmos*, but the word to a Greek speaker would have referred as well to the isthmus of Corinth that separated the Peloponnese from mainland Greece. Plato is making a joke at Sparta's expense, and the image here is geographical, where Athens, akin to the rational kind of soul, is separated from the Peloponnese, the (lesser) mortal kinds.

14 It is striking that Plato characterizes the soul-kinds by their functions rather than by the objects of their desires, which would be more familiar to us from how the parts of soul are identified in the *Republic*; see Cooper 1984 for more on this strategy in that dialogue. However, Johansen 2004, 153 n. 28, briefly notes that this approach is also present, albeit briefly, at *Rep* 436a, where Plato asks whether we do (*prattomen*) different things by means of the same part of us, and concludes that we learn with one part, feel anger with another, and so on.

heed.¹⁵ Commentators who stress that the body is more constructive for the soul's purposes in this dialogue course, have plenty of evidence to help make their case.¹⁶ Yet, it should not be lost on us that the construction of the human body follows Timaeus' announcement that the account is woven together from the two causes: the divine, and the necessary (auxiliary) cause (69a–b). The body and the mortal kinds of soul are the products of a compromise. As useful as the mortal kinds of soul are, they are indeed a compromise.¹⁷ We might be thankful for our coiled intestines or for the eyes that allow us to see the cosmos and thus do philosophy (47a–c), but we should not think that Plato has abandoned the *Phaedo's* and *Cratylus's* view that the body is a tomb and a prison of the soul.

2 The Body as the Cause of Psychic Disorders

2.1 The Key Passage

The *Timaeus's* discussion of the body as the cause of psychic disorders revolves around the following passage:

Whereas the diseases of the body happen to come about in the way just described, the diseases of the soul come about on account of a condition of the body in the following way. We must grant that thoughtlessness is the disease of the soul, and there are two kinds of thoughtlessness: the first is madness; the other is ignorance. So, whatever someone suffers from, if it involves either, it must be called a disease. We must hold that excessive pleasures and pains are the greatest diseases for the soul. For when a man enjoys himself excessively or, on the other hand, suffers pains, and is eager to seize on one and avoid the other inappropriately, he is unable to see or hear the correct thing, and he is in a frenzy and at that time least able to reason. Whenever the seed in the marrow proliferates and overflows, like a tree bearing a disproportionate amount of fruits, he is in for a lot of anguish, as well as a lot of pleasures in relation to his desires and what they bear.

¹⁵ Steel 2001, 115 claims that the creation of the mortal kinds of soul is a response to a need for someone to drive the vehicle that is the body: 'the human body must be moved and directed by the soul, its own driver, i.e., it must become a living organism, an animated body, an "automobile." In order to do so, the gods had to make another kind of soul.' However, the motion of the rational kind is sufficient for the motion of the whole body. (Karfik 2005, in fact, argues that the mortal kinds just *are* motions initiated by the rational kind.) It is not about motion, but instead about control. The rational kind has an ally, spirit, to help enforce its commands, and the appetites give information in response to which reason can give commands.

¹⁶ Again, see Johansen 2004, 137–159 as an illustration.

¹⁷ The same goes for the bodily organs. Plato insists that the body contains all its organs because the gods had foreseen the soul's need for them (45b).

He is maddened for most of his life on account of the largest pleasures and pains, and he keeps his soul diseased and senseless due to his body, although he will seem not sick but voluntarily evil. Yet, the truth about sexual intemperance is that, for the most part, it is a disease of the soul that comes to be on account of having one substance, due to the porosity of the bones, that flows through the body and moistens it. Pretty much every lack of control over pleasures is said to be something reproachable as though they are voluntary, but it is wrong to make reproaches; for nobody does evil voluntarily, but people become evil on account of a bad condition of the body and unskilled upbringing. These things are hostile to and involuntary for everyone. (86b–86e).

The Greek text of the first sentence is ambiguous. It reads: καὶ τὰ μὲν περὶ τὸ σῶμα νοσήματα ταύτη συμβαίνει γινόμενα, τὰ δὲ περὶ ψυχὴν διὰ σώματος ἕξιν τῆδε (86b). It has been widely understood as something like ‘whereas bodily diseases happen to come about in the preceding way, those diseases of the soul that are due to the body arise in the following way’.¹⁸ This implies that there are some psychic disorders that are not due to the body. The motivation for this common translation is, overwhelmingly, that it does not seem to agree with what Plato says elsewhere that the body is the cause of *all* psychic disorders.

Let us first consider the translation. The disagreement concerns whether διὰ σώματος ἕξιν (‘on account of a condition of the body’) is part of the noun phrase (i.e., whether it restricts or modifies the noun), instead of as a prepositional phrase modifying the subject’s action through the verb. I take it as a prepositional phrase, but the other translations do not. Their translation would require that διὰ σώματος ἕξιν be in the attributive position through the repetition of the article τὰ. (The other way of generating the attributive position, through positioning the modifier between the article and the modified noun, is not possible here because the noun νοσήματα (‘diseases’) is not explicitly given in this clause.) The fact that there is already a prepositional phrase modifying the noun troubles the other translation

18 Lamb 1925, Jowett 1875, Zeyl 2000, and Waterfield and Gregory 2009 are some English translations that do this. Robinson 2000, 40, agrees with the traditional translation, and it seems that so does Price 1995, 86. Cornford 1937, 344–346, oddly, translates the text in line with my own interpretation (‘disorders of the soul are caused by the bodily condition in the following way’) but then interprets the text differently: ‘it is not stated that *all* mental disorders are *solely* due to bodily states’ (emphasis in original). Cornford does not explain what he has in mind or why, but if he thinks that some disorders arise perhaps on account of bad educations *because* prior disorders, caused by the body, made us vulnerable to them, then he and I agree, as I shall discuss later. Taylor 1928, 610ff, does not have a clear position on this, but his view that ‘who speaks is not Plato nor Socrates but Timaeus’ leads him to apparently agree with my translation because his view means he does not have to wrestle with the fact that this thought does not seem to square with what Plato says elsewhere (and which I shall correct below in the main text). In non-English scholarship, see Pigeaud 1981, 52, who agrees with my interpretation; in contrast, Brisson 1992, 209, does not.

further: since *περὶ ψυχῆν* ('of the soul') is already modifying the noun *τὰ*, the other translation would require a conjunction such as *te* or *kai* ('and') in order to make the subject something like 'those diseases that are of the soul *and* that come about on account of a condition in the body', especially since the phrase that we are disagreeing about is, again, not in the attributive position. I therefore conclude that *διὰ σώματος ἕξις* is a prepositional phrase that does not modify the noun in question for two reasons: (i) it does not appear in the attributive position, so it is not a noun-modifying phrase; and (ii) it is not conjoined with the phrase *περὶ ψυχῆν* that *does* modify the noun.

The viability of the traditional translation rests mostly on whether the *dia* phrase can restrict or further qualify the *peri* phrase in the absence of any markers (such as a *te* or a *kai*). Kühner and Gerth 1904 and Smyth 1920 do not give us any reason to think that Greek word order permits that, but it is hard to conclusively prove that such a construction is impossible, and it is always a possibility that a conjunction such as *kai* was initially present but eventually dropped out. Ultimately, the way to conclusively resolve this problem is through the forthcoming discussion of Plato's philosophy, but I quickly note that there are (many) other parallel passages where the word order operates as my interpretation predicts, and I cannot find any passages that work as the traditional translation requires. For instance, at *Tim* 72c5, a *dia* phrase and *peri* phrase are next to each other, without one qualifying the other.¹⁹ At *Tim* 76a2, a *peri* phrase is nested within a *dia* phrase (i.e., *dia tēn peri ton enkelaphon notida*), showing that one is qualifying the other. Other philosophers show the same thing in the same way: Aristotle (e.g., *EE* 1230b27) prefers to use the nested construction to show one phrase qualifying the other. We can observe that the author of the *Constitution of Athens* similarly used the two prepositional phrases merely next to each other when he did *not* want one to qualify the other (38.4.5–6). These considerations should lend considerable credibility to my translation, but it is appropriate to turn to the theory expressed in the passage for what Plato had in mind.²⁰

¹⁹ We could easily multiply examples of this: e.g., *Theaetetus* 185a4 and 185b6.

²⁰ This crucial passage is the subject of Gill 2000, which takes an altogether different approach than the one here. His reading is self-described as 'Galenic,' since Galen uses *Tim* 86b–e in his treatise *That the Powers of the Soul Depend on the Mixtures of the Body*. He argues that changes in our psychological state depend on the proportions of the four humors (blood, black and yellow bile, and phlegm). Gill 2000, 67, following Galen, does not think that 'we can square the idea of a psyche as an independent, separate, immortal entity' with 86b. This claim is too strong: we can explain psychic disorders in terms of contact between the soul and the body's forces, and there is no reason to adopt the stronger Galenic position. A careful reading of the *Timaeus*' account of psychic disorders does not support Gill's epiphenomenalism, and, in fact, describing the causes of the psychic disorders as the body acting *on* the soul counts against it.

2.2 The Theory

The philosophical view captured by my translation is precisely what we would expect Plato to say for the following reasons.

The *Phaedo* tells us what the soul does when it is itself according to itself.²¹ The phrase ‘itself according to itself’ (*autē kath’ autēn*) is distinctly Platonic and usually helps pick out the Forms, because the term above all stresses *separateness*.²² When Plato applies the term to the soul, he is telling us what the soul does separately from the body: it sees the Forms, and he tells us explicitly that this happens when the ‘soul exists itself according to itself, separately from the body, but not before’ (66e–67a). Later, he reaffirms that the soul, itself according to itself, investigates and comes to be with the Forms, and that this condition is wisdom (79d). The contrast is between a disembodied, pure soul, on the one hand, and an embodied soul, on the other. Indeed, Plato will often talk about desires (82c) and affections (*pathē*) according to the body (94b). Although the subject of these is in every case the soul, exactly how embodiment generates for the soul a different set of desires and affections is unclear.²³

Moreover, we would expect someone who believes in reincarnation as a punishment to hold that the body impedes the proper functioning of the soul in *some way*. The *Timaeus*’ discussion of psychic disorders specifies that way, while also spelling out how embodiment does the things the *Phaedo* warns of. The

²¹ I prefer the translation ‘itself according to itself’ because it stresses that what is true of something *according to* its nature, which is important as the article goes on. Such alternatives as ‘by itself’ are fine too so long as the preposition is not taken instrumentally (e.g., ‘by means of itself’) but rather as a description of what something does *on its own* (e.g., ‘I am doing this by myself’).

²² Sedley 1999, 72, claims that the term refers to the Forms, but it does not always do this (e.g., *Meno* 100b, *Symposium* 183d, *Theaetetus* 206a); at a minimum, the term stresses a certain level of separation or abstraction, which is what Ademollo 2013, 48, argues. Burnyeat 2000, 36, is helpful here, too, and so is Peterson 2000, 35–37, who argues that the ‘basic and minimal use’ of the term ‘itself’, not exactly ‘itself according to itself’, is as a ‘topic-focusing device.’ It is helpful to consider how Plato uses the term even when qualifying Forms. Sharma 2005, 156, says that the term ‘signals that a Form has a “pure” nature, one unmixed with that of any other entity.’ Purity of soul is exactly what the philosopher is aiming for in practicing for death. Broackes 2009 discusses the use of the term in Aristophanes’ *Clouds* (193) and considers a possible Socratic heritage.

²³ In addition to the explanation that will follow in the main text, we are also told in the *Timaeus* that two sets of desires are natural to each human being: there is the body’s desire for food, and desires of the soul for wisdom; whichever motion is stronger win out over the other (88b).

Timaeus specifically calls reincarnation a penalty for vice (*dikē*) (92b).²⁴ The body is the punishment our souls receive.²⁵ The *Cratylus* tells us that the body is the soul's prison, where the soul pays its penalty (400c).²⁶ It is only natural to wonder what the punishment or the penalty really consists in: the body has to cause some evils for the soul, but without the *Timaeus*, we would not know what those evils are. Even worse, the body is a perverse kind of prison: it makes the soul an accomplice in its own imprisonment (*Phaedo* 82e). Socrates warns that the greatest and most extreme evil that the soul undergoes is that, when someone feels an intense pleasure or pain, the soul is *forced* (*anankazetai*) to believe that the object of the pleasure or pain is the 'clearest and most true, although it is not' (83c).²⁷ What we do not know is how any of this occurs, but the *Timaeus* is designed to tell us.

The point is that we should expect Plato to say that the body is *the* cause of psychic disorders. If the soul, itself according to itself, functions optimally, but does not when embodied, then the cause of its malfunctioning is the body, and this

24 So does the non-mythological part of the *Phaedo*: 'it is likely that these are not the souls of good people, but of inferior people, which are forced to wander around these regions, paying the penalty for their earlier vicious upbringing (*kakēs trophēs*). They wander until that point when their desire (*epithumia*) for what follows them around, the bodily (*tou sōmatoeidous*), again imprisons (*endountai*) them in a body' (81d–e). Later, the *Phaedo*'s myth presents the afterlife differently, where being in the lake of Tartarus is our punishment (114b), and reincarnation is not said to be a punishment.

25 The dialogues differ on this point. The *Republic*, *Phaedrus*, *Gorgias*, and the myth at the end of the *Phaedo* present punishments and rewards happening in the afterlife, distinct from reincarnation (which is not explicitly mentioned in the *Gorgias* at all). The *Timaeus*, in contrast, presents no distinct reward-and-punishment phase happening before the reincarnation, and the reincarnation is said to be the punishment. See Kamtekar 2016 for a discussion of this shift in Plato's eschatology. I also do not deny that the body is *at the same time* useful for the soul. As I present in Section 1, the *Timaeus* says that the gods created the body for a good purpose (i.e., as a vehicle for the soul [69c]). In fact, even the *Cratylus*, just around when Socrates reports the Orphic view that the body is our tomb, says that the soul uses the body for language (400c). The *Alcibiades* presents our body as a tool in general (128a–131a).

26 It is helpful to consider just how often this idea occurs. It is present, for example, in the *Gorgias*: Socrates there says to Callicles that he has heard it 'from wise men that we are now dead and that the body is our tomb' (493a). We are told in the *Phaedrus*' myth that, in the company of Zeus, 'we are pure and not entombed (*asēmantoi*) in that which we carry around now, what we call the body' (250c). Socrates distances himself from the idea in the *Gorgias* and the *Cratylus* by mentioning the wise men or the followers of Orpheus, but the *Phaedrus* has him present it himself.

27 I am more interested in the *Timaeus*' physical explanation of this idea, but see Woolf 2004, Russell 2005, Butler 2012, and Ebrely 2017 for analyses of the *Phaedo*.

makes good sense with the version of the theory of reincarnation that appears in the *Timaeus*, on which reincarnation is a punishment for the soul.²⁸

The explanation in the passage above attributed sexual intemperance to the excess of a substance in the body, but it does not identify the substance. It seems, though, that Timaeus thinks that most psychic disorders are caused by bile and phlegm. He says that they wander up and down the body, and if they do not find a way out, their 'moist vapors' (*atmida*) will confound the motions of the soul (87a). Moreover, he says that bile and phlegm 'produce all kinds of diseases in the soul' (87a). They produce different disorders in the soul depending on which of the 'three locations (*topous*) of the soul they are carried to' (87a–b). They will cause the rational kind of soul to be forgetful and slow-witted, for instance; the spirited kind to be rash or cowardly; and the appetitive kind to be unmanageable and melancholic.²⁹

To a modern reader, this might all seem strange, especially because bile and phlegm are mysterious substances in the *Timaeus*. Plato is never explicit about their make-up or origin, and it is plausible that he is relying on a tradition that at least included Philolaus. Philolaus reportedly said that illnesses 'come about because of bile, blood, and phlegm, and that the origin of illnesses is the following: [...] blood becomes thick when the flesh compresses it inward and becomes thin when the vessels in the flesh are divided [and...] phlegm is composed out of fluids [and...] bile is a liquid that comes from the flesh.'³⁰ Plato himself says only that decomposing flesh returns to the bloodstream (from which the whole body is nourished in the first place), and the resulting blood will have bile and phlegm in it (82e). It sounds like he is agreeing with Philolaus here, but he is falling short of saying outright that the bile and phlegm is made up of, or comes from, decomposing flesh.³¹

However, Plato does disagree with Philolaus' view as it is reported to us: the latter thought that the basic constituent of the body was hot, and so even phlegm is hot (DK 44 A27); in contrast, Plato believes that phlegm is cold. What we can learn

28 Some scholars have gone so far as to claim that the soul *depends on* the body for its activity, whereas I am arguing that the soul's activity is *impeded* by the body. Carone 2005, 244, who argues that the soul 'necessitates corporeal conditions and space for its activity,' is a good example; see Fronterotta 2007 for a reply along different lines from what is pursued here.

29 See Tracy 1969, 125ff, for a discussion of why the appetitive kind of soul can be melancholic. The question is related to passages in the *Laws*, *Cratylus*, and parts of the Hippocratic corpus, such as *On Ancient Medicine*.

30 This is fragment DK 44 A27, translated by Laks and Most 2016.

31 Taylor 1928, 592–593, hesitantly affirms that he is, whereas Tracy 1969, 122–130, unflinchingly commits himself to this view.

from the *Timaeus* is that bile and phlegm are not harmless. He describes bile and phlegm as ‘destructive’ (*diephtharmena*) (82e).³² This does not mean that they cannot be useful for us: the presence of bile in the blood causes it to have many colors (82e), and bile’s ability to do this presumably facilitates the liver’s color-changing functions, since its colors are said to be bilious (71b). The existence of bile might be yet another example of the gods working under constraints: bile exists as part of the system by which reason controls the appetites, but it poses a considerable danger to the soul.

In short, bile and phlegm are destructive due to the way that their vapors disrupt the motions of the different kinds of soul in our body. We shall see that Plato explains all psychic disorders in this way: there is a sort of motion that is proper to each kind of soul that is at risk of disruption by bodily substances.

The first sense we get in the *Timaeus* that the body causes disorders in the soul comes halfway through when the Demiurge has delegated to the lower gods the responsibility of creating the body. The body has things flowing in and out of it at all times. He then identifies two threats to the embodied soul: nutrition and sensation. They both pose the same danger: they disturb the circular motions of the rational kind of soul. The first threat is described as a wave or billow that supplies nutrition (*kuma ho tēn trophēn*) (43b) and as a stream that brings growth and nutrition (*to reuma tēs auxēs kai trophēs epiē(i)*) (44b). Sensation is described similarly as a disturbance that shakes the body and makes its way to the rational kind of soul. The circles of the same and the different have their orbits distorted by both the nutritive and perceptual streams: they produce ‘fractures’ (*klaseis*) and ‘corruptions’ (*diaphthoras*) in every possible way (43e). The result is that the soul no longer judges properly. Whereas people would normally judge something as different from something else, for example, they might now judge it as the same.³³ The overall failure is that the circle of the same no longer is in charge and that the soul lacks a leader (*hegemōn*) (44a).³⁴ We then spend the rest of our lives trying to restore the soul’s original condition by studying astronomy, copying the world-soul’s motions.

32 The same passage describes them as *palinaireta*, which is a strange image to use: the word in other contexts seems to pick out, say, a building that has been torn down and then rebuilt, or a person that has removed from office and then returns to office. It is hard to see what Plato has in mind, but it might be a reference to the fact that bile and phlegm (appear to be) decomposing flesh that has re-entered the bloodstream.

33 Cowardice, for instance, involves having some false beliefs, and so we can fill out this account by referring to this passage’s (43e–44a) explanation that disruptions of the psychic circles cause us to judge badly. We might also bear in mind the *Phaedo*’s view that some pleasures force us to form false beliefs (83c).

34 It is interesting to read this passage in light of *Phaedo* 83c, discussed above, according to which indulging in a pleasure *forces* us to believe certain things.

We get more information about nutrition later in the dialogue: nutrition is distributed by the bloodstream to each part of the body that needs it (81a–c). Above we saw that our ability to receive nutrition was invented by the gods to shore up the defects of the human body's components, and now we are learning that it is a threat to our reason. Plato is doing more here than reminding us of the gods' constraints: he is explaining why children are unable to reason. The younger we are, the more intense the nutritive stream is because it is doing more work for us by helping us grow. The older we are, the less nutrition our digestive system produces in the first place because the triangles that turn our food into nourishment are less efficient. Plato holds that sensation is a worse risk for us than nutrition because the nutritive system gets weaker as we get older, at which time the circles of the same and different right themselves and then we are gradually able to judge things correctly (44b–c). In sight, the cause of the disturbance is a ray of fire that is sometimes called the 'visual stream' (45c). As for the other senses, Plato is mostly silent, but we might imagine that there is a stream made of air that facilitates hearing, for example.³⁵

His account of sensation explains why the *Phaedo* insists on the danger that investigating through the body's sense-organs poses to the soul.³⁶ The *Phaedo* describes it for us ethically, using the language of what is proper to the philosopher (e.g., 65b–e); the *Timaeus* puts the point in the language of physics and natural philosophy. More generally, Plato is spelling out for us the full sense in which the body is the cause of disorders in the soul. We have three causes: bile or phlegm; nutrition; and sensation.³⁷ Nutrition remains the most mysterious of the three.

³⁵ He does say, after explaining sight, that 'concerning sound and hearing, the same account holds' (47c).

³⁶ However, the *Timaeus* seems to be more optimistic about the use of perception than the *Phaedo*. (See Johansen 2000, 87, for a discussion of the *Timaeus*' 'more constructive view of the role of the body' than the *Phaedo*.) An anonymous reviewer at *Apeiron* helpfully points to *Timaeus*' claims that it is beneficial for our souls to listen to harmonies (47d) and observing the movements of the heavenly bodies (47a–c), and that health is a balance between body and soul (88b–c). I add that *Timaeus* also stresses that studying the sensible world generally is necessary for understanding the intelligible (46d–e). This does represent a significant departure from the *Phaedo*, where the impression that perception might be useful is left, at best, implicit in the claim that perceptual episodes trigger recollection (e.g., 74d–e; 75e). This is tempered by the *Phaedo*'s frequent dismissals of perception (e.g., 66a). The continuity I stress between these two dialogues lies in the view that perception is disruptive of good psychic functioning.

³⁷ Could pleasures and pains count as a cause of psychic disorders, as well? I doubt it. Bodily pleasures and pains are treated as no different (in relevant respects) from sensation, and this is consistent with the approach in the *Phaedo*, where Plato takes sensation as analogous to pleasure. There is a debate on how to understand this analogy: see Woolf 2004, 101–103, and Ebrely 2017, 10–12, for a reply. See Wolfsdorf 2014 for a discussion of what he calls sense-perceptual pleasure in the *Timaeus*.

Sensation is a danger because it is analyzed as a rectilinear motion striking against the circular motions of reason. Bile and phlegm work similarly by producing disruptive vapors. It is unclear how, precisely, the nourishment carried by the bloodstream disrupts those same motions. We can speculate that the brain, containing the rational kind of soul, needs blood or nourishment, and the provision of it is particularly violent when we are younger.³⁸

The key move, then, in Plato's account of psychic disorders is the thought that the motions of the soul are disrupted by embodied life. The *Timaeus'* picture of the rational kind of soul, stated briefly, is that it is a collection of eight circles: one circle carries the other seven inside it, and the circular motion of the outermost circle is knowledge, whereas the motions of the inner circles are opinion (*doxa*) (34c–37d). The world-soul is never disordered and always intelligent (36e); our souls are unfortunately not so well off, and they do get disordered. This discrepancy is explained by the fact that there is nothing outside the world-soul to impinge on it and throw the orbits off balance.³⁹ What unifies all the above explanations of disorders is that there is something — the nutritive stream, the perceptual stream, or bilious and phlegmatic vapors — that throws off the orbits of the circles. The list of causes of psychic disorders is exhaustive: given that Plato analyzes psychic disorders in terms of disrupted psychic motions, I cannot see what else could have that effect.⁴⁰ Nothing else seems to even be able to cause the disruptions, so it is not clear what other scholars think could be a cause of psychic disorder besides the body. The important takeaway is the explanation of psychic disorders as disturbances of the inner circles.

38 This is backed up by *Timaeus'* claim that natural death occurs when the bonds that hold the triangles of the marrow together fail when they no longer receive enough nourishment (81c–e).

39 Cf. Plotinus, who says '[embodied souls] are able to dwell in bodies in a manner that best approximates that of the dwelling of the soul of the cosmos in the body of the cosmos. This manner involves not coming into collision, and not allowing themselves to be shaken by pleasures attacking them from outside or by the things they see coming at them, even if it is something hard. The soul of the cosmos, then, remains unfazed, since there is nothing that could faze it' (2.9.18.24–28; tr. Gerson 2017).

40 It does seem to be possible that a disembodied soul could be disordered. The *Phaedrus'* myth has a disembodied soul whose appetitive part is causing problems for the rational kind of soul (246a–b). This incompatibility is what we would expect, given that the *Timaeus'* psychology overall is incompatible with the *Phaedrus*. *Timaeus* does know that the appetites threaten reason, which is why he says that the gods create the neck to separate them and mitigate, but not remove, the threat. He even explains this as the motions of one part of us overcoming the motions of another part (88a–b). The problem here is that the *Phaedrus* says this danger persists even outside of a body, but, of course, since the *Timaeus* says that non-rational kinds of soul are mortal, the theories are not compatible. There is no obvious way to resolve this tension.

2.3 Causation and Plato's Vocabulary

I have so far been speaking about the *causes* of psychic disorders, but the status of these causes has been unclear. In the passage (82e–88c) of the *Timaeus* that concerns diseases, both bodily and psychic, Plato consistently prefers to use *dia* with an accusative noun, usually translated as ‘on account of’. We observe *dia* with the accusative when he discusses the various diseases that white phlegm causes (85a1); how epilepsy is caused (85b3); how bile causes inflammations (85b5); how heat liquifies fibers in the blood (85c4); that psychic disorders are caused by a condition of the body (86b2); how sexual intemperance is caused by an abundance of a bodily substance (86d3); that vice is caused in the body (86e1); that evils in the soul are caused by the body (86e4); and that a lack of education and a bad bodily condition cause someone to be evil (87b3). He sometimes does use more explicit and theoretical causal language of *aitia* (‘cause’). He talks about the need to ‘blame’ (*aitiateon*) the ones who raise us badly (87b4). He calls his proposed remedial treatments for the body and soul causes (*aitiai*) of improvements (87c2). Lastly, an under-trained body is ‘responsible for’ (*aition*) many evils in the soul ‘on account of’ (*dia*) the body’s bad condition (87e3–4).⁴¹ This last instance is sufficient to show that there is a tight connection in Plato’s mind between *aitia*-related words and the relationship expressed here by *dia* followed by an accusative noun.

We should consider whether the body is an *auxiliary cause* (*sunaitia*). The *Timaeus* deploys this category in order to distinguish what people ordinarily think is a cause from the true causes (46d). A lit match is an auxiliary cause of the burning of a paper; the true cause is the *nous* that is directing the lit match. An auxiliary cause is ‘not capable of possessing any reason (*nous*) or thought (*logos*) about anything’ (46d). If it is ‘separated from wisdom (*phronēseōs*)’, it will only produce accidental and disorderly effects every time’ (46e). These auxiliary causes, therefore, are employed by the Demiurge in order to advance his goals for the cosmos. An example is the creation of our finger- and toenails. Plato says that the sinew, skin, and bone that compose them are auxiliary causes, but what is most truly a cause (*aitiōtatē*) is the gods’ thought (*dianoia*) that in the future, ‘animals and women would come to be from men’ and so men should be equipped with the nails that they would need as animals in order to be familiar with them (76d–e). The gods use auxiliary causes to advance their goals, but it is their intelligence that is the true cause. Since there is no *nous* that directs the body to be an auxiliary cause of psychic disorders, the body is not, strictly speaking, an auxiliary cause. However, perhaps we can extend the category more widely: each system in the

⁴¹ There is a difference between *aitios/aition* and *aitia*, which we see preserved at least still in the *Phaedo*; for more, see Frede 1987.

body is an auxiliary cause of a result intended by the gods, as laid out in the first section above, and psychic disorders arise when those systems fail, as they are prone to do because of the gods' suboptimal working conditions. The body causes psychic disorders not exactly as a *sunaitia*: no *nous* has employed the body to cause psychic disorders, but they arise as a result of limits that constrain the lower gods from achieving their purposes perfectly.

3 Education

An apparent counter-example to the view that the body is the cause of all psychic disorders is bad, or non-existent, education. After all, the text does read 'people become evil on account of a bad condition of the body and unskilled upbringing' (86e). We shall resolve this by seeing that education is corrective: good education corrects the psychic defects caused by the body.⁴² Being deprived of that education lets those problems go uncorrected.⁴³ Moreover, since the body can worsen our judgment by disrupting the soul-circles, it is possible for new illnesses to be introduced by being badly educated. For instance, a student might assent to a false view, such as that pleasure is the highest good, because of their worsened judgment-making, and this could lead to further vicious behavior. In fact, he warns about just this worsened judgment-making at *Timaeus* 43e, which we saw above. Plato even thinks that good education will involve training the body, not just the soul, such that we reduce the damage the body does to the soul. So, a bad education fails to correct psychic disorders and leaves us vulnerable to others. As a result, the body is not necessarily the immediate cause of each disorder taken on its own, but it causes at a minimum the initial vulnerability. Good education is the escape.

Our political environment, which includes our education, affects the condition of our soul. Plato explains that bad people come to be bad, not just because of the body, but also because they live under 'vicious political constitutions and in cities where there are vicious speeches' (87b). The natural question is how these things make us bad, and Plato answers: it is because 'no healing studies (*iatika mathēmata*) are pursued in any way by people from youth' in these cities (87b). This is the

⁴² Lautner 2011, 23–24, takes 'bodily condition' so broadly that the term captures even education, such that blaming education is blaming the body, too. It is hard to see what Plato means when he blames the body, if he means something as broad as this.

⁴³ Wolt 2019, 248, says that 'in addition to biological factors (like an excess of marrow), social factors play a role in producing vice as well.' This is true so long as we acknowledge that the body causes vices in a different way: the body makes the soul vulnerable to disorders as well as causing them, whereas a bad education creates them by exploiting existing vulnerabilities and disorders.

first hint that Plato sees studying as corrective: the studies that he prescribes are therapeutic and remedial. The subject comes up when discussing nutrition, too. When the strength of the nutritive stream has diminished and is less disruptive to our soul, the orbits of the circles of the same and different gradually are restored, and we again become capable of reasoning – but Plato tells us that this re-discovery of reason has to be paired with ‘correct nurturing (*trophē*) and education’ (44b–c). If this happens, the person will ‘have escaped the greatest illness (*apophugon tēn megistēn noson*) and be entirely healthy (*hugiēs*)’; if not, the person will limp through life and go to the afterlife unintelligent (44c). Education is being presented here as about correcting the orbits of the soul, and as about avoiding evil. Also, the language of the greatest *illness* anticipates the discussion of just that at the end of the dialogue.

It is frustrating that Plato does not tell us much more than this about education in the *Timaeus*. The last comment he makes specifically about it, although he does continue to talk briefly about caring for the soul and body, is that ‘it is necessary to, as much as possible, flee from evil (*phugein kakian*) through nurture and the studies we undertake, and seize its opposite, but these are subjects for another speech’ (87b). Our upbringing and studying are once again presented as ways of *fleeing* from the disordered conditions our bodies impose on us, but Plato deflects these questions to other dialogues.

The overall picture here is of a soul disordered by embodiment and of being educated back to its original condition.⁴⁴ Bad education ruins the soul in the sense that it keeps it ruined, whereas the cause of the soul’s prior bad condition was only the body. Consider the *Republic*’s view that the ideal city’s soldiers ought to be exposed to the appropriate musical modes that produce the desired virtue in their soul (398c–399e). This is an example of how education corrects the soul’s disorders. The later books’ rich image of the soul being led from the cave concerns the soul’s perfection, and at the end of the dialogue, there is a brief discussion of how its relationship with the Forms reveals the soul as ‘pure’ and in its ‘true nature (*alēthē phusin*)’ (612a). The *Timaeus* does not develop to the same degree at all the way that the soul’s original condition is restored: the closest we get are the scattered remarks about education as remedial and that astronomy returns the orbits of our psychic circles to what they were pre-embodiment (e.g., 90b–d). Presumably, Critias would have further developed these ideas. Critias says that his own speech should come after *Timaeus*’ in order to capitalize on the latter’s account of human beings to develop an account of education (*Tim* 27a). At the beginning of his speech, he tells the company that his subject is “mortal things,” as opposed to the

⁴⁴ Socrates tells Polus in the *Gorgias* that he will not know whether the king of Persia is happy until he knows where he stands with respect to justice and education (*paideia*) (470e).

divine things that he says was Timaeus' concern (*Critias* 107e).⁴⁵ Instead, what we get in the *Timaeus*, but not in the *Republic* or elsewhere, is an account of how embodiment causes psychic disorders: through disrupting the motions of the rational kind of soul. This can take the form of bile and phlegm rising against them, the rectilinear motion of sensation striking against them, or, when we are young, the nutritive stream accomplishing the same.

We also ought to take care of our body to prevent further disorders from arising.⁴⁶ Caring for the body is a matter of doing gymnastics, which any learner, even a mathematician, should do (88b–e). Plato likens body-care to soul-care, except that in the latter, we are imitating the world-soul, whereas in the former, we are imitating the receptacle. The body should be cared for 'in an imitation of the structure of the cosmos,' which is how we could also describe soul-care (88c–d), but we should more specifically 'imitate the nurturer and nurse of the cosmos' (88d). The point here is that we should keep our body constantly exercised and never let it be at rest, much like the constant motion of the receptacle. Plato is concerned about the way that a restful body will respond to the motions inside and outside it: it is particularly vulnerable when it is at rest, such that the solution is to never let it be at rest (88d–e). Further, the right kind of constant exercise will keep the right substances in the body in the right places, never letting 'hostile' substances next to each other, where they might 'engender wars and diseases' (88e). If we train the soul but not the body, two problems will arise. The first is that the human being will not be beautiful (*kalon*), since it will lack proportion (*asummetron*). The second, more pressing problem is that the body will not be able to perform its job as the vehicle of the soul: it will tire out quickly, have convulsions, and fall down too much (87e). Plato also thinks that intellectual labor that requires the body (such as delivering speeches or teaching) is so demanding that we have to physically train for it. On the other hand, if we neglect our soul but train our body instead, there is the problem that the soul's well-being will be overcome by the body's desires.

4 Conclusion

The dialogues offer a medical analysis of vice, but not a medical solution. For the individual, philosophy is our best bet to correct the damage done to the soul; physical

⁴⁵ Pradeau 1998, 517–518, discusses the way that the *Critias* is foreshadowed in the gaps of Timaeus' system.

⁴⁶ See Brisson 2015, 452, who makes a similar point in order to develop an account of agency and responsibility for Plato in the *Timaeus*: in short, responsibility is about intervening in a causal chain (as opposed to, say, inaugurating one). See also Stalley 1981 for a treatment of the same subject.

training can prevent more damage. At the political level, the *Republic's* education system and the penal systems described in varying detail throughout the corpus, such as in the *Gorgias* and *Laws*, would help, if they could be or were ever implemented. The destructiveness of the body is a result of its creation by the lower gods and earns for it the status of being our soul's tomb and prison. Bad political arrangements do not *cause* psychic disorders; nutrition, sensation, and unhealthy substances in the body are sufficient for that, but bad education and an unjust constitution exacerbate, and fail to correct, the disorders. Plato often compares the true legislator or judge to a doctor (*Gorgias* 477a–478b, *Statesman* 293b–c, *Laws* 720a–c): their job, after all, is to correct the disorders in the soul caused by the body.

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