Douglas R. Campbell*

Plato on Sungitia

https://doi.org/10.1515/apeiron-2022-0013 Received February 10, 2022; accepted July 7, 2023; published online July 26, 2023

Abstract: I argue that Plato thinks that a *sunaition* is a mere tool used by a soul (or by the cosmic *nous*) to promote an intended outcome. In the first section, I develop the connection between *sunaitia* and Plato's teleology. In the second section, I argue that *sunaitia* belong to Plato's theory of the soul as a self-mover: specifically, they are those things that are set in motion by the soul in the service of some goal. I also argue against several popular and long-standing interpretations, namely, that *sunaitia* correspond to Aristotle's idea of hypothetical necessity, that *sunaitia* are the 'how' in an explanation (whereas the true cause is the 'why'), and that Plato's causal views should be read through Aristotle's fourfold schema. I conclude the article by surveying the history of *sunaitia* after Plato's usage.

Keywords: Aristotle; causation; cosmology; Plato; *sunaitia*; Timaeus

Socrates, in his intellectual autobiography in Plato's *Phaedo*, provides explanations of things in terms of the Forms and that without which the cause would not be a cause (*ekeino aneu hou to aition ouk an pot' eiē aition*). For instance, Milo of Kroton's strength is explained by his participation in the Form of Strength. His body is merely *that without which* he would not be strong. It is an important fact about Plato's view of causation and explanation that the *Timaeus* develops a category of *sunaitia* that changes how we ought to construct explanations. This article is about this category, how we should understand what Plato has in mind, and how it is received by later philosophers.

There is no standard English translation of the term *sunaition*. 'Contributory cause', 'accessory cause', 'cooperative cause', 'subsidiary cause', 'subservient cause', 'concurrent cause', 'contingent cause', and 'auxiliary cause' are examples that populate the field.¹ Plato's own vocabulary seems to have been fluid: for instance,

¹ E.g., Johansen 2020 prefers 'contributory cause'; Cornford 1937 and Strange 1999 use 'accessory cause', followed by Brisson 2001's 'cause accessoire'; Cornford also uses 'subsidiary cause' (e.g., at 1937: 159), and so does Steel 2003; Lennox 1985 uses 'cooperative cause'; Gerson 2020: 49 n. 42 uses 'auxiliary cause' as short-hand for 'auxiliary to the true cause'; Fowler 1921's translation of the *Statesman* uses 'contingent cause'. If we look outside Plato (to, e.g., Smith's translation of *De Anima*

^{*}Corresponding author: Douglas R. Campbell, Department of Philosophy, Alma College, SAC 347, 614 W Superior Street, Alma, MI, 48801, USA, E-mail: campbelldr@alma.edu

summetaitia appears to be identical to sunaitia (at, e.g., Tim 46e), and the Laws uses sunaitia in its non-technical, non-philosophical sense (at, e.g., 936d) while using, as we shall see below, a different conceptual scheme to get at the same idea. We also observe sunaitia in its non-technical sense in the Gorgias (519b) and the (possibly spurious) Seventh Letter (329c). In its non-technical sense, sunaition means 'accomplice'. We see this in Isocrates (15.96) and Antiphon (4.6.4). The idea is that if I give someone a weapon with which they then harm someone else, they are the cause, and I am the sunaition of the action.

Plato exploits this core meaning of the term to mean something that helps the cause achieve its effect. Consider the *Timaeus*' explanation of nails. They are composed of sinew, skin, and bone, which are the *sunaitia*, 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 because animals tend to rely on claws, hoofs, and nails for their sustenance (76d–e).² In doing so, Plato has flipped around an important aspect of the non-technical meaning of *sunaitia*: now the accomplice is not the one who gives the weapon but is the weapon itself. The true cause is the understanding (*nous*) of the one who uses it. In this way, *sunaitia* might be plausibly understood as *accessory causes*, but since they, as we shall see further below, lack any causal power on their own, the preferred translation might be 'accessories to the cause'. They are instruments.

We need to distinguish between two questions. The first is the *formal* question: what is the role that *sunaitia* play? The second is the *occupancy* question: what things occupy this role? I shall argue that the answer to the formal question is that *sunaitia* are those things that an agent uses as a means to achieve an end. This role will be expanded upon and filled out throughout the discussion below. I shall argue that this role is occupied by those things that souls, as self-movers, set in motion, and that Plato uses his theory of the soul as a self-mover to develop the idea of *sunaitia*.

In the first section below, I argue that the category of *sunaitia* develops out of the *Timaeus*' teleology, which explains its absence in the *Phaedo*. In the second section, I argue that the category is intimately tied to Plato's psychology and specifically address the occupancy question. *Sunaitia* are those things set in motion (and used) by the soul as it achieves the end that it has set for itself; it is in this sense that they are instruments. I push back on a popular scholarly tendency to view *sunaitia* merely as *how* some effect is achieved in contrast to the true cause (*aitia*), seen as the *why*, as

⁽⁴¹⁶a14) collected in Barnes 1984), we see other translations, such as 'concurrent cause' (which at times is used by Steel 2003, too); in Haskin 2000's translation of Simplicius, we see 'co-cause'. In Fleet 1997's translation of Simplicius, it is 'joint cause'.

² All translations of Plato are my own. I have consulted the editions listed in the bibliography.

well as on a tendency to project backwards Aristotle's model of the four causes. Sunaitia are not any of the canonical four causes, not even the material cause. Further, I argue that it is a mistake to see in the category an inchoate grasp of what Aristotle will later call hypothetical necessity. They are tools, but they are not always necessary tools. I conclude by briefly surveying the legacy of sunaitia: the term as Plato uses it is rejected due to its imprecision. When later thinkers such as Aristotle, Iamblichus, and Sextus Empiricus use it, they have in mind something different from Plato's vision. This fact is a consequence of the fluidity and imprecision of Plato's vocabulary.

1 Sunaitia and Teleology

Sunaitia are bound up with Plato's teleology. They are first introduced by Plato as those things that the Demiurge uses to accomplish his aim of making the world as good as possible: "so, all of these things are sunaitia, which God uses as his servants [hupēretousin] when bringing about the character [idean] of what is best [aristou] as much as possible" (46c). The word that Plato uses—hupēretousin—suggests that the sunaitia are in his employ or at his beck and call.⁴ We see this again later when Plato says that "the Demiurge used the servant causes [aitiais hupēretousais], but he

³ Just how widespread this tendency is will be made clear in the third section, when we discuss the way that in antiquity, Platonists, from at least the early Roman imperial period onwards, understood Plato's causal views through Aristotle's schema. (We can find this even earlier when Aristotle assesses which of his four causes Plato recognized; see Metaphysics I.6 988a8-10. Yet, this is different from the Middle Platonists claiming that Plato did endorse all four of Aristotle's causes.) From early on in modern Plato scholarship, too, we can observe this tendency. For instance, consider Zeller 1922: 687 n. 1's claim that in the Phaedo's autobiography, when Socrates is disagreeing with the natural philosophers, he is presenting the Forms as formal, efficient, and final causes at once: "in dieser ganzen Auseinandersetzung wird nun zwischen der begrifflichen, der wirkenden und der Endursache nicht loss nicht unterschieden, sondern alle drei werden deutlich genug far Ein und dasselbe." More recently, Strange 1999: 407 set out to "compare" Plato's account of causation in the *Timaeus* to "Aristotle's causes," and he found in Plato hypothetical necessity and usages of all four of Aristotle's causes, which is precisely the reading I oppose in Section 2 below. (There is a distinction that can be drawn between those who think that Aristotle's causal framework is inchoate and blurry in Plato. such as apparently Zeller 1922, as opposed to others who think that it is active and doing important philosophical work in Plato, and I believe that the Middle Platonists, Strange 1999, and many more are examples of the latter; other examples will be discussed below.)

⁴ Consider the usage of the verb in the *Symposium* (196c), when Plato says that we willingly serve Love. It suggests subordination in its usage at *Republic* IV 467a. At *Laws* XI 914a, the idea is of *submission*. This last sense is particularly important; for the idea, as we shall see, is that the Demiurge is *taking over* some motions and re-directing them. Submission squares with the image of *nous* persuading necessity.

himself established the good order in everything that comes to be" (68e). The term *sunaitia* drops out in favor of 'servant cause'. Consider the two examples of *sunaitia* in the *Timaeus*: one is the sinew, skin, and bone that the gods use to make nails, mentioned above (76d–e); the other is our pair of eyes (46e–47c). The advantage that sight has for us is that it allows us to see the heavens and thus lets us inquire into the nature of the universe, do philosophy, and correct the damage done to our souls by our bodies. Plato clarifies that this is the true cause (*aitia*) of sight: "that God devised and gave to us sight *in order that we might* behold the revolutions of the heavens and apply them to our own thought" (47b–c; emphasis mine). The point is that, just as in the example of fingernails, the true cause is identified as the reason for which the Demiurge used the relevant *sunaitia*.

The connection between *sunaitia* and teleology explains why the idea is not present or used in the *Phaedo*. While Socrates does say that he was looking for explanations that featured teleology, he could not find them and had to settle for something "second-best" (99d).⁷ There are, however, scholars who have maintained that Socrates is being ironic when he says that his method is only the second-best.⁸ Yet, this seems hard to believe: the autobiography is specifically a report of Socrates' failure to find the sorts of explanations that he aimed to find, thus leading to his having to take refuge in the method of hypothesizing Forms (99e–100a). Indeed, it is precisely this failure to find the *Timaeus*' teleology – with its ability to explain that each thing exists for the best – that leads to the absence of any instruments or tools in the theory of explanations. In other words, since *sunaitia* are those things that help an agent achieve his or her ends, they are of course absent in the *Phaedo*: no cosmic agent is identified as the cause, leading to the promotion of Forms as causes (in a

⁵ More specifically, the *sunaition* in the case of vision is the complex mechanical system of fire in our eyes (*Tim* 45b–46a) and mirror images (46a–c).

⁶ See Campbell 2022 for a discussion of using examples of orderly objects, given to us in perception, to improve the condition of our soul.

⁷ See Tempesta 2003 for an argument that the *Phaedo*'s second sailing is the second-best. There is a long history of attempts to find in the explanations that ultimately end up adopted by Socrates some form of teleology. See, for instance, Damascius (*in Phd* §417–418); Bluck 1957; Crombie 1963: 171, and Gould 1963: 77. I follow Burge 1971: 1–2 n. 2 in saying that since Socrates proceeds to the second sailing precisely because he has failed to find a teleological explanation, this interpretation "seems clearly wrong." Shorey 1933: 534, Murphy 1951:146, and Vlastos 1969: 297 n. 15 agree. However, unlike what some (e.g., Sharma 2015: 408 n. 39) at least seem to suggest, I do not think that Socrates is *giving up* on teleological explanations in favor of the second-best, but only postponing that sort of inquiry until he can make sense of it. That this is a mere *postponement* is indicated by Socrates himself calling this the second-best. He is well-aware of his shortcomings, which is a good reason to, instead of seeing a criticism, get behind Sedley 1989: 359's view that Socrates has become a "pupil" of Timaeus, from whom he can learn how to defend a teleological world-view.

⁸ Cf. Burnet 1911: 103-108, Vlastos 1969, and Burge 1971.

second-best sense). In contrast, the *Timaeus* holds up what is most truly a cause (*aitiōtatē*; 76d5) as the thought (*dianoia*) of the gods, who are aiming at what is best. ⁹ The absence of this teleology guarantees the absence of *sunaitia* and its replacement by *that without which the cause would not be a cause* (*Phaedo* 99b). ¹⁰ There is no room for a more constructive category without an agent who uses it to construct things.

The usefulness of *sunaitia* is best observed in the *Statesman*, which has the most occurrences of the term in the corpus. 11 There, Plato identifies skills that assist the art of weaving in bringing about its products by providing the tools necessary for weaving (281c) and then applies this insight to the search for the statesman's art by insisting that we need to distinguish the statesman's art from those skills that merely provide the art with what is necessary for it to achieve its aim (287b). The art of the statesman displays a combination of the Phaedo's idea of a necessary condition with the Timaeus' idea of intelligence directing the sunaitia. For without the sunaitia that furnish the relevant tool, "neither the city nor the statesman's art could ever come to be" (287d). It is the description of the way that the statesman uses, say, the art of building for the sake of the city's defense, without which the statesman cannot exist, that lends so much credibility to the view that sunaitia are hypothetically necessary, which I shall complicate below. For now, let us observe that the presentation of sunaitia as useful for carrying out some assigned task shows that not only are sunaitia constructive but that they also exist in a context of direction and supervision. The example of weaving is intended to shine light on the statesman's art, which the characters have already agreed directs the other arts (260c-261b).

The importance of teleology in this theory of crafts as *sunaitia* cannot be overstated. The interlocutors end up distinguishing the various crafts that support the statesman and the city by what each one aims at. For instance, painting exists for our

⁹ When thinking about *aitiōtatē*, it is helpful to have in mind the corresponding phrase in the *Phaedo*, *to aition tō(i) onti* ('the true cause') (99b).

¹⁰ Specifically, I resist the claims, often made by scholars, that the language of *sunaitia* merely captures what is already present in the *Phaedo*. E.g., Menn 1995: 39 claims that "Plato seems not to have the word [*sunaition*] at *Phaedo* 99b, where he is forced to paraphrase it instead as 'that without which the cause could not be a cause.'" The introduction of the Demiurge fundamentally changes the account of causation; the term is not a mere paraphrase of the *Phaedo*'s category. This mistake was especially common among early-20th-century commentators, such as Burnet 1911: 106 and Taylor 1928: 359. Johansen 2004: 103ff. deserves credit for correcting this mistake, arguing that the *Timaeus* does not adorn mere necessary conditions in the language of *sunaitia*.

¹¹ There are thirteen occurrences of the word in total: one in the *Seventh Letter* (329c6); one in the *Laws* (936d1); two in the *Timaeus* (46c7, 76d6); one in the *Gorgias* (519b2); and eight in the *Statesman* (281c4, 281d11, 281e4, 281e9, 287b7, 287c8, 287d3, 289c8). This is complicated by the fact that sometimes some other term is used to refer to the same idea (e.g., *summetaitia* and *aitia hupēretousa*) in the *Timaeus* as we have seen above.

amusement, whereas building is for our defense (288b–c).¹² Each one is at the disposal of the statesman to use appropriately. This is significant because this—i.e., the distinction between a craft and its *sunaitia*—is how the *Statesman* advances the agenda of both the *Phaedo* and the *Timaeus*.¹³ In all three dialogues, there is a serious concern that people are mistaken about the true causes of things. In the *Phaedo*:

Some people are not able to distinguish what is in fact a cause from that without which a cause would not be able to be a cause; most people seem to me to be groping in the dark when they call the latter a cause and thus give to it a name that does not belong to it (99b).

Plato, in the *Timaeus*, says the following:

So, all of these things are *sunaitia*, which God uses as his servants when bringing about the character [*idean*] of what is best [*aristou*] as much as possible. But most people think that they are not *sunaitia* but that they are the causes of everything because they make things cold or hot, and they solidify or liquify (46c–d).

In the *Statesman*, the Visitor has to distinguish the *sunaitia* of the statesman's craft from the craft itself for these very reasons, which in turn are made more complicated by the fact that it seems plausible (*dokein pithanon*) to say that everything is the tool (*organon*) of *something* (287b–d).¹⁴ I take this to mean that the constructive role played by *sunaitia* in these latter two dialogues makes them easily mistaken for the

¹² For a larger discussion of this, see Kelsey 2004: 26-28.

¹³ We might see the discussion in the *Phaedo* being advanced in another way, too. There is an ambiguity in the *Phaedo*'s conception of that without which the cause would not be a cause: on the one hand, there is the sort of necessity involved in having hard material for a saw and another sort that is involved in having a key to open a lock. The *Phaedo* does not distinguish between these two kinds of necessity. A central claim in this article is that the *Timaeus* and, especially, the *Statesman* prioritize the instrumental relationship that we see in the latter, although they do so without ever calling instruments necessary; as we shall see, instruments are *useful*, not necessary. Perhaps it is this very ambiguity that prompted Plato to stop thinking in terms of necessity. The *Statesman* does a clearer job identifying this, however, because the cosmological context of the *Timaeus* is such that the way the gods achieve their aim is by using matter (e.g., the *sunaitia* of fingernails *are* sinew, skin, and bone), making the cases look more like the former sort of necessity involved in having hard material for a saw. This is discussed in greater length below.

¹⁴ It is worth pointing out just how deep the fluidity of the term *sunaitia* goes for Plato, which we can observe in the myriad examples given across the *Statesman* and the *Timaeus*. I credit an anonymous reviewer at *Apeiron* for drawing my attention to this. Subordinate crafts, the products of subordinate crafts, and the tools of those subordinate crafts are all called *sunaitia*. The art of building, the walls, the hammers, the bricks, and perhaps even the builders themselves are all *sunaitia* for statesmanship, which relies on defense for the achievement of its purpose; all of these are *sunaitia* to the extent that they are useful for statesmanship. This core meaning of *usefulness* and the imprecision of the term *sunaitia* will be explored as the article goes on.

true causes.¹⁵ The *Timaeus* helpfully advances the point and spells out the difference for the reader, saying that "things like these [that is, the *sunaitia*] are completely unable to possess any reason [*logon*] or understanding [*noun*] about anything. For we must affirm that the only thing for which it is appropriate to possess understanding is soul" (46d). This passage is crucial for answering the occupancy question regarding *sunaitia*: the role that true causes play can be occupied only by something with *nous*, thereby relegating things without *nous* to, at most, the status of *sunaitia*.

In distinguishing causes from what are popularly mistaken as causes, Plato follows Thucydides, who famously introduced his history of the Peloponnesian War thus:

To explain why they broke it [that is, why the Athenians and the Spartans broke their truce] I first set out the reasons they gave and the matters of dispute between them so that no one in future ever need enquire how it came about that so great a war arose among the Greeks. I consider the truest cause, though the one least openly stated, to be this: the Athenians were becoming powerful and inspired fear in the Spartans and so forced them into war. As for the reasons that were openly stated by each side for breaking the treaty and going to war, they were as follows (I.1.23). ¹⁶

Thucydides distinguishes between the truest (*alēthestaten*) cause and the alleged, or openly stated, so-called causes (*legomenai aitiai*) in a way that is echoed in Plato's own project to clarify what a cause is.¹⁷ The identification in the *Timaeus* of the gods' thought (*dianoia*) as what is most truly a cause (*aitiōtatē*) in the coming-to-be of fingernails (76d) reflects Thucydides' usage of *alēthestaten*.

The last text that needs to be examined is from the Laws

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 [prōtourgoi] 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 [noun] and guides everything, as a true deity, happily and correctly,

¹⁵ Meanwhile, in the *Phaedo*, Plato does not offer an account of what it is that has led to people being unable to distinguish the true causes from mere necessary conditions, other than saying that people "do not know what to look for" when trying to explain something (99c).

¹⁶ Translated by Jeremy Mynott.

¹⁷ It is not obvious whether Thucydides would deny that the openly stated causes are causes at all. What I aim to emphasize here is that Thucydides is introducing the view that some causes are truer than other causes, as indicated by *alēthestaten*. As well, Thucydides distinguishes between what people *say* are causes (i.e., what they openly state) and what *are* the causes, and both Plato and Thucydides want to dig past what people say are causes.

or when it pairs with the lack of understanding [anoia(i)], it brings about the opposite (Laws X 896e–897b).¹⁸

This passage does not explicitly mention *sunaitia*, but that is not unexpected: Plato's vocabulary has been consistently fluid from the start. ¹⁹ All the hallmarks of *sunaitia* are present, especially the fact that soul—which we know is important from *Timaeus* 46c–d's claim that only it can possess *nous—uses* things to achieve a certain end that it has in mind.

The Laws highlights the curious idea of the soul not just using things but taking over certain motions. The picture is one on which the soul does not initiate the motions of bodies but instead takes over them and guides them to a certain conclusion. This is reflected in the *Timaeus'* cosmogony and anthropogony. The gods in the *Timaeus* use the four so-called elements (and their properties, such as smoothness) to bring about the result they have in mind. We see this throughout the creation of the human body. Consider the creation of the mouth. The gods knew that nourishment and a desire for it were necessary for the existence of mortal races (70e), but the mouth accommodates more than that need. The mouth was designed simultaneously as "an entrance for what is necessary and an exit for what is best [ariston]" (75e). The nourishment that enters is necessary for our body, and the stream of speech that leaves is the noblest (kalliston) stream (75e). This feature was made possible by teeth, tongue, and lips, all of which work together to allow the mouth to be a tool of both necessity and the best (75d).

When we frame in this way the idea of intelligent agents *taking over*, say, the hardness of a body for their own ends, we see that this is similar to the *Timaeus*' idea of *nous* persuading necessity:

The coming-to-be of this cosmos was born as an offspring of necessity and understanding [nou]: understanding ruled over necessity by persuading it to lead [agein] most of the things that come to be towards what is best [beltiston], and in this way and in accordance with these things this

¹⁸ Carone 1994: 283ff. argues that the soul in this passage is the world-soul. Campbell 2021: 527ff. argues that this passage refers to soul generically, reflecting the fact that, in the first sentence, no article is present and that the subject is simply *psuchē*; consider also that *false belief* is attributed to soul here, which cannot possibly obtain of the world-soul.

¹⁹ As I said in the introduction, the *Laws* does use the word *sunaitia* in its non-technical meaning of 'accomplice' (e.g., at 936d).

²⁰ The *Laws* uses the language of *paralambanein*, and the *Timaeus* introduces that language: e.g., "such being the nature of all these things by necessity [*ex anankēs*], the craftsman of all the most beautiful and best things took them over [*parelambanen*] when he was producing the self-sufficient and most perfect god" (68e). Plato then goes onto call the *sunaitia* 'servant causes' (69a).

²¹ There is possibly a further parallel to the *Phaedrus*, as Carone 1994: 279ff. and Skemp 1942: 6ff. discuss.

cosmos was organized from the beginning, through necessity being overcome by intelligent persuasion [peithous emphronos] (48a).

The intelligent persuasion of necessity towards pursuing what is best is, in a sense, the central idea of *sunaitia* as we have seen so far. ²² This idea is that the theology of the Demiurge involves the use of tools, namely, sunaitia.

Plutarch is helpful here. He says that "just as a man skilled in attunement and rhythm is expected not to create sound or movement either but to make sound tuneful and movement rhythmical, so god did not himself create either the tangibility and resistance of body or the imagination and motivity of soul, but he took over [paralabon] both the principles [arkhas]" (On the Generation of the Soul in the Timaeus 1014B).²³ Plutarch here highlights that craftspeople do not create the material that they are working on. They merely order it. Perhaps it would have been clearer to point to statue-makers, who make statues by merely re-ordering the clay, not by making the clay itself. Plutarch uses the same language as the Laws passage—'taking over' (paralambanō)—to express what craftspeople do to their materials, and indeed, Plato in Laws X likens the gods who supervise the cosmos to craftspeople on the grounds that they use every material at their disposal to create an ordered whole (903c–e).²⁴

This approach to the *Timaeus* illustrates the close connection between the view that God is a craftsperson and the view that his material is that which he takes over and subordinates to him before using it. However, this raises possibly more questions than it answers. For instance, the Laws presents soul as taking over and then using motions, and the place of the soul remains unclear in this, and the apparent connection between sunaitia and hypothetical necessity ought to be further illuminated. I take these issues up now.

²² Both ideas also occur as part of an account of the perfection of the cosmos, but it is important to acknowledge that scholars have argued that there are differences between the Laws and the Timaeus on larger background ideas. For instance, scholars commonly accept that the Demiurge in the Timaeus is not omnipotent. E.g., see Margel 2019: 1–5. In contrast, scholars will often affirm that Plato thinks that God in the Laws is omnipotent. E.g., see Nightingale 1996: 89, who says that "the gods could have made the universe wholly good" but did not, in order to preserve the possibility of human free will. Taylor 1928: 184 agrees when he says, about Laws X, that "clearly it is meant at least that there is nowhere in the universe any independent power which can cause this divine purpose to fail of its intent." For more on the contrast, see Mohr 1985: 185: "unlike the Demiurge of the Timaeus, however, the god of Laws X seems to be omnipotent. He is not omnipotent in the sense of being able to do just anything and everything, like making false analytically true statements; for instance, it is not possible for the Demiurge of the Laws to make it false that an event which has happened has happened. Rather he is omnipotent in that his materials as materials offer no resistance to his demiurgic activities."

²³ This translation is by Harold Cherniss.

²⁴ Plato makes this observation about what craftspeople do also in the *Gorgias* (e.g., 503e-504a).

2 Sungitia as Tools

2.1 The Place of Sunaitia in Plato's Theory of the Soul

The soul is explicitly involved in the *Laws*' discussion of prime- and secondary-working motions (X 896e–897b), but it is implicit in discussions of *nous* as the true cause. For soul is the only thing in which *nous* can come to be (cf. *Phil* 30c, *Tim* 30b, and *Sophist* 249a). ²⁵ In this section, I shall argue that we need to appeal to Plato's theory of the soul in order to make sense of *sunaitia*. Then, I shall argue that we should not think of *sunaitia* in terms of Aristotle's hypothetical necessity. In both arguments, I shall demonstrate that it is a mistake to think that we can comfortably read Plato's causal views through Aristotle's fourfold causal schema. Aristotle himself notes that Plato used only the material and formal causes (*Metaphysics* I.6 988a8–10), but we will come to see that there are reasons for doubting that even material causation can be attributed to Plato. One of the central differences between their causal views comes down to the place of Plato's theory that the soul is the source of motion. Specifically, he presents *sunaitia* as those things that are set in motion by the soul, thus answering the occupancy question.

Timaeus 46c—e argues that there are two kinds of causes.²⁶ Plato says that most people mistakenly think that *sunaitia* are the true causes because they observe them producing their effect by, for instance, making things hot or cold. Plato clarifies that they cannot be the true cause because they are "not capable of possessing any reason [logon] or understanding [noun] about anything" (46d). Only the soul, he says, properly possesses (*prosēkei ktasthai*) understanding. This introduces a contrast between the soul and *sunaitia*, on the grounds that possession of *nous* is required to

²⁵ I do not, however, think that *nous* is required to exist in a soul if it is to exist at all. See Menn 1995 for a defense of this. The Demiurge's *nous* is the true cause of something without the mediation of the soul.

²⁶ There is a question of whether *sunaitia* for Plato are a kind of cause at all: he does say (*Tim* 46e) that both *aitiai* and *sunaitia* are "kinds [*genē*]" of causes. (See Johansen 2004: 104 for a discussion of this.) Yet, the whole story is more complicated because *sunaitia* are introduced in this passage *in contrast* to causes in an unqualified sense (i.e., *aitiai*). Perhaps what Plato means at 46e is that *sunaitia* are a kind of cause in the sense that they are part of a complete explanation, and, after all, in a sense causes just are the items that feature in explanations. This is not helped by Plato's phrase *aitia hupēretousa*, easily translated as 'servant cause'. The context, however, indicates that the Demiurge uses them *as* servants, which means that they are servants *to* the cause. See also Broadie 2011: 177's claim that the *Timaeus* is criticizing the "naivety" of Socrates in the *Phaedo*, in the sense that Socrates naively believed that because physical things are not causes, they do not have any causal role whatsoever. This is what I mean: the claim that *sunaitia* are a *genos* of causes might not mean that they are truly causes in an unqualified sense but might indicate only that they have some causal role.

be a cause.²⁷ He then advances this contrast by arguing that the philosopher must study both sorts of causes: the first, which belong to intelligent nature (*emphronos phuseōs*), and the second, which *are moved by other things* (*hup' allōn kinoumenōn*), including those moved by necessity (46e). This is an appeal to the account of the soul as a self-mover: there is a contrast between the cause that has intelligence (explicitly identified as the soul) and those things that are moved by other things. It is left implicit that the former is not moved by other things and is *self-moved*. It is sometimes thought that Plato's view of self-motion does not appear in the *Timaeus*, but this is not accurate. Indeed, at the end of the dialogue, he enumerates different kinds of motion, saying firstly that "the best motion is the one that happens within oneself and is caused by oneself. For it bears the greatest affinity to thought and to the motion of the cosmos. Motion that is caused by something else is inferior" (89a). This is another appeal to the doctrine of the self-mover, especially since there is a connection between the motions of thought and the universe, which the reader observes earlier in the dialogue too (e.g., at 47c).²⁸

Above, we saw Laws 896e-897b where Plato identified the intelligent motions of the soul (e.g., examination and deliberation) as the prime-working motions that take over (paralambanō) the secondary-working motions of bodies, such as combination and separation, and direct them with nous towards the good of the cosmos. Prōtourgoi ('prime-working') is a strange term and is not extant anywhere outside this passage until late antiquity. When we consider that this passage appears at the culmination of an argument that has showed that the universe is supervised by a good, intelligent soul—an argument that has deployed the concept of the soul as selfmover—and is specifying how, exactly, the soul does that, we see that Plato envisions a long chain of things in motion, the first of which are the soul's self-initiated, intelligent motions, which are teleological and aim specifically at the good of the cosmos, and then the subsequent motions of bodies are those that the soul uses as a tool. The soul's motions are *prime*-working because they are the *first*. Indeed, he says: "those [motions] that follow these [namely, the soul's motions], such as heat, cold, roughness, smoothness, white, black, bitter, and sweet, all of which the soul uses, when it both cooperates with divine understanding [noun] and guides everything, as a

²⁷ Menn 1995: 38 argues that in this passage, Plato is imitating (and "mockingly" transforming) a similar passage in Diogenes of Apollonia. The argument is that Diogenes has adduced similar considerations to show that air is the true cause of the world's being so ordered, and Plato is here turning them on their head to support his own view that soul is that through which *nous* acts on the world.

28 It is this application of the theory of the soul as the source of motion that explains why Plato does not consider the lower gods as *sunaitia*, even though, in the non-technical sense of the term, they are indeed *sunaitioi* (i.e., accomplices) of the Demiurge. The lower gods possess *nous* and therefore do not count as *sunaitia*, according to the *Timaeus*' schema at 46e, even though, to be sure, the Demiurge does create and then use the lower gods (39dff.).

true deity, happily and correctly" (897b; emphasis mine).²⁹ From this passage we learn that Plato's causal views are connected to the theory of the soul such that *nous*, which is the true cause, achieves its aim by means of the soul *using* other things.

We can be more precise. It is not that the soul exactly initiates the first motions that bodies have; it rather *directs* and guides pre-existing, chaotic motions. The *Laws* passage tells us that when a body is moved not in conjunction with *nous* but its opposite, *anoia*, "it brings about the opposite" result (897b). The *Timaeus* confirms the same, explaining that when a *sunaition* is "separated from wisdom [*phronēseōs*], it will only produce accidental and disorderly effects every time" (46e). This should remind us that souls—and, indeed, the Demiurge and the lower gods—are acting on the so-called *wandering cause*, the chaotic material to which order is being added (53b).³⁰ It is neither inert nor stationary. That is why Plato prefers to talk about the soul's intelligent motions *taking over* and *directing* pre-existing motions. It does not initiate *all* motion, but it does initiate the oriented-to-the-good motions that we observe in the ordered cosmos.³¹

The significance of this lies in the fact that it muddies the distinction between what Aristotle calls the efficient cause and the final cause. When Plato says that the sinew is the *sunaition* and the true cause is the thought that it was best to use the sinew to promote a certain outcome, he does not mean merely that the *sunaitia* are the *how* and the true cause is the *why*. Rather, he means that the true cause is a motion that takes over the motions of bodies in order to guide them to a certain end. In other words, Plato conceives of the true cause as both the final cause in a distorted sense, since it is an intention or plan to use something *for the sake of* something else, and as an efficient cause, since it is a motion that initiates other motions: specifically, the initiated motion is a now-orderly, purposive motion, unlike the disorderly motion that was taken over.³² It is no wonder that Aristotle had a hard time

²⁹ Here at 897b, the language of *use* is *hois psuchē khromenē* ('which the soul uses'). At 894b, he makes the same point in slightly different language: there exists a kind of motion that is "always able to move both itself and other things by means of combination and separation, increase and its opposite, and generation and corruption."

³⁰ Necessity, without noetic intervention, is merely the wandering cause (i.e., the cause of disorderly motion), whereas with noetic intervention, it is a *sunaition*, namely, something used (or persuaded, so to speak) by *nous* to promote a certain end.

³¹ There is a very large body of literature concerning how we should understand the claim that the soul is the source of all motion when it seems to act on things already set in motion by necessity, as well as adjacent mysteries such as the identity of the source of the entirely disorderly motions that (at least) seem to be part of Plato's cosmology. See, e.g., Sesemann 1912: 174ff., Cornford 1937: 209, Vlastos 1939, Cherniss 1944: 362ff. and 1954, Herter 1957, Mohr 1980, Carone 1994, Nightingale 1996, Wood 2009: 362–379, and Campbell 2021. See Mason 2006 for a study of what necessity is.

³² These are not even final causes (hence 'distorted') in a recognizably Aristotelian sense. As Balme 1987: 276 correctly points out, "the novelty in Aristotle's theory was his insistence that finality is within nature: it is part of the natural process, not imposed upon it by an independent agent like

recognizing final and efficient causes in Plato's philosophy. The teleological motions of *nous are the first efficient causes*. ³³ They are the ones that *guide* disorderly motions.

For this reason, we should reject (or, at least, complicate) one popular scholarly trend in thinking about sunaitia. This trend sees a sunaition as the term in an explanation that specifies how something comes about, whereas the aitia specifies why something comes about. Francis Cornford seems to have inaugurated this tradition when he argued that the *Timaeus* says that while understanding the interactions between visible things and our eyes is important, "they will not reveal the true reason or explanation (aitia) of vision, the purpose it is rationally designed to serve. They tell us 'how' we see, but not 'why'." He then refers to an aitia as the "rational purpose" of a thing.³⁵ This interpretation gets at something important, namely, it correctly identifies that Plato is answering a question implicitly left unanswered in the Phaedo. We might notice that something is wet now but remember that it was not always so. The explanation that it is wet because it participates in the Form of Wetness tells us, perhaps at best, what it means for something to be wet. Yet, we might wonder how it came about that this thing came to participate in the Form of Wetness. The Phaedo deploys the categories of becoming and change when introducing the sophisticated hypothesis (e.g., that fevers make us sick because they bring with them the relevant Form), but even then, it does not explain how these changes are guided by a conception of what is best. 36 Meanwhile, the *Timaeus* tells us

Plato's world soul or Demiourgos." Aristotle's final causes are not the *intentions* that a creator or agent has for something; they are internal to something's nature. This is why Lennox 1985 calls Plato's teleology 'unnatural teleology', in contrast to Aristotle's 'natural teleology'. This is one reason why Aristotle fails to see final causation in Plato's system. See also Johnson 2008. After all, my point is that we should *not* see Plato's causes as Aristotle's.

³³ See Charles 1991: 103ff. for a discussion of why Aristotle believes that "teleological causation is a genuine type of causation" distinct from efficient causation. It is precisely this distinction that we do not see observed in Plato and that Aristotle is developing.

³⁴ Cornford 1937: 157. There is something similar in Shorey 1933: 179, though not exactly pertinent to *sunaitia* or the *Timaeus*. There, Shorey argues that the presentation of Forms as causes in the *Phaedo* offers "only a tautological logic [that is, ...] a consistent and systematic substitution of the logical reason for all other forms of cause." If he means that Plato's causes are *merely* terms in explanations, then I think that he is mistaken.

³⁵ Cornford 1937: 159. A more recent example of this reading is Strange 1999: 44, who, for instance, frames the problem for Plato as one about "how the final cause can act to produce phenomena" (emphasis in original). I think that the true cause, nous, is active just as the *sunaitia* are active, except that the former's motions come first and therefore guide the later motions. Note that Strange has unpacked Plato's view in terms of Aristotelian causal theory, which I argue is objectionable.

³⁶ The fact that Socrates *is* interested in change in the *Phaedo* but cannot answer this question there is a disappointment, and surely it is part of what makes the theory that he settled on in that dialogue the second-best. Johansen 2014 insightfully argues that the Demiurge is posited by Plato in order to account for how *becoming* comes to be like *being*, and the Demiurge is specifically aiming at the good.

that something came to participate in the Form of Wetness because someone thought it was best to splash it with water. As I said above, the *Phaedo* grasps for the Demiurge but does not find it.³⁷ Interpreting the *sunaition* as the *how* and the *aitia* as the *why* does get an important detail right, but it misrepresents the fact that the true cause is an efficient cause in motion just as the *sunaitia* are. This misrepresentation is the problem with Cornford's view. The true cause merely appears earlier in the chain of things in motion. It is not just a *why*.

2.2 Plato's *Sunaitia*, and Aristotle on Causes and Hypothetical Necessity

Another popular trend among recent commentators is explaining Plato's *sunaitia* through Aristotle's idea of hypothetical necessity. ³⁸ We observe cases of hypothetical necessity when something is necessary *for* something else to come to be. ³⁹ Here is one of Aristotle's examples:

For instance, why is a saw such as it is? To effect so-and-so and for the sake of so-and-so. This end, however, cannot be realized unless the saw is made of iron. It is, therefore, necessary for it to be of iron, if we are to have a saw and perform the operation of sawing. What is necessary then, is necessary on a hypothesis, not as an end. Necessity is in the matter, while that for the sake of which is in the definition (*Physics* II.9 200a9–14).⁴⁰

When something is necessary *for* something else to come to be, then it is hypothetically necessary.⁴¹ It is crucial for our purposes here that Aristotle explains

³⁷ Socrates can, of course, identify himself (or, more precisely, his *nous*) as the cause of his sitting in prison: he thought it was best to be sitting there, as opposed to running away, but this is not possible to do in the case of cosmic and natural phenomena without the Demiurge.

³⁸ See, for instance, Johansen 2020, and Strange 1999.

³⁹ As Cooper 1987: 243 explains, that which is "necessary is always a goal posited or set up (*hupotethen*) as something to be achieved." Aristotle then has to argue, as he does in *Physics* II, that there really are goals in nature, such that he can use this concept in, e.g., biological contexts.

⁴⁰ Translated by R.P. Hardie and R.K. Gaye in Barnes 1984.

⁴¹ It is odd to think that Aristotle could mean that a saw being made of iron is *truly necessary* for some end. After all, the saw could chop down a tree while being made of something else (even if not just *anything*); being made of iron does not seem to be necessary. At any rate, this is how hypothetical necessity is treated in the contemporary scholarship, and I am opposed to attempts to assimilate Platonic *sunaitia* to hypothetical necessity thus understood. See, e.g., Johansen 2020: 109: "again the contributing cause is not a mere necessary condition. It is that of a tool required for a specific job." If we could broaden the conception of hypothetical necessity to allow there to be a greater range of tools that are suitable for the job, then Plato and Aristotle might come closer to converging on this issue; nevertheless, there is no escaping the fact that Plato's view of *sunaitia* is inseparable from the theory

hypothetical necessity in terms of his own causal schema. That which is hypothetically necessary is "plainly what we call by the name of matter" (II.9 200a31). The natural scientist, he explains, must study both the material cause and the final cause, but "especially" the latter (200b2). For something's end *is* the "cause" of the matter, not *vice versa* (200b2).

Indeed, *Parts of Animals* contains a long discussion of hypothetical necessity, the first part of which argues that final causation is the primary sort of causation (I.1 639a12–640a11). This text makes explicit that what is hypothetically necessary is, in a sense, a sort of instrument or tool:

For if a piece of wood is to be split with an axe, the axe must of necessity be hard; and, if hard, must of necessity be made of bronze or iron. Now exactly in the same way the body, since it is an instrument—for both the body as a whole and its several parts individually are for the sake of something—if it is to do its work, must of necessity be of such and such a character, and made of such and such materials (I.1 642a9-14). 42

One reason why today's commentators are comfortable assimilating Aristotle's view of hypothetical necessity to Plato's account of *sunaitia* is that both thinkers are interested in applying their views to the same contexts and examples. Aristotle explains his idea with examples from the crafts and then uses the account in *Parts of Animals* to explain biological facts. ⁴³ Consider that later in *PA* I.1, Aristotle applies what he has just developed to respiration, saying that "in dealing with respiration we must show that it takes place for such or such a final object; and we must also show that this and that part of the process is necessitated by this and that other stage of it" (642a32–642a35). *Sunaitia* are important in Plato's own biology, just as Aristotle's concept of hypothetical necessity is important in his.

Aristotle clarifies the connection between hypothetical necessity and *to sunaition* in *Metaphysics* V.5. This chapter of the *Metaphysics* is dedicated to listing the ways in which 'necessary' (*anankaion*) is said. The first way concerns necessary conditions of life, namely, those things without which an animal cannot exist (*einai*); breathing and food are two examples (1015a20–22). The word that Aristotle uses for the necessary conditions is *ta sunaitia*. The application of *sunaitia* in the biological context of eating and breathing is worth noting. More importantly, *sunaitia* are related to hypothetical necessity: e.g., if an animal is to exist, it is necessary for it to breathe and eat. Another meaning of 'the necessary' is that which cannot be

of the soul as a self-mover when it comes to answering the *occupancy question*. More details follow in the main text.

⁴² Translated by William Ogle in Barnes 1984.

⁴³ For instance, *Parts of Animals* I.1 contains many examples of crafts, such as builders making houses (e.g., 640a19-20), which Aristotle also uses in *Physics* II.9.

otherwise (1015a34–35). This is the core meaning of the word from which all other meanings are derived. He explains that life, for instance, is not possible without certain necessary conditions (*ta sunaitia*), and that fact is why this cause is a kind of necessity (*hē aitia tis anankē estin hautē*) (1015b6). We know from other texts that the particular kind that Aristotle has in mind is hypothetical necessity. These comments are reflections on the *formal* question, but there is still the matter of the *occupancy* question for Aristotle to which we ought to attend.

Aristotle uses the term to sunaition fourteen times in the extant corpus, and he generally means what he lays out in the Metaphysics. For instance, in $De\ Anima$ (II.2 416a14–18), he contrasts the sunaition of growth with the cause in an unqualified sense ($hapl\bar{o}s$), and he thinks that the failure to observe this distinction was a mistake made by his predecessors, such as Empedocles. Food, for instance, is not the cause of growth in an unqualified sense, but food is necessary for the growth of a living thing, such that the growth would stop if the food stopped. However, the growth is directed by the soul, which we observe from the fact that the growth is not uncontrolled and that there is a proportion that determines size. Aristotle concludes that the soul is the cause in an unqualified sense. An important addition that Aristotle makes to his concept of sunaitia is that they belong to the side of the material cause ($hul\bar{e}$), as opposed to the proportion, which belongs to the soul and to the side of the account (logos) (416a18). This is in line with his understanding of hypothetical necessity as being part of the material cause as well.

Aristotle, therefore, makes it easy for commentators to understand Plato's idea of *sunaitia* as a form of hypothetical necessity. ⁴⁵ This is because Aristotle thinks that *sunaitia* are (1) necessary for the coming-to-be of something else and (2) useful for the

⁴⁴ However, we might want to read the claim that the cause in an unqualified sense is part of the *logos* (i.e., the formal cause) alongside his discussion of final causality being the first cause in *Physics* II.9 and *Parts of Animals* I.1 above. It might help to recall that those two passages concerned hypothetical necessity explicitly, whereas this *De Anima* passage concerns *sunaitia* specifically.

⁴⁵ This was the case both in antiquity and today. When Proclus argues that matter is neither good nor bad, he argues that it is *necessary* for the Demiurge to carry out his divine project. According to him, we should say "that it [that is, matter] is necessary for generation, and not evil that it has been generated by god as necessary and to be necessary for the forms that in themselves would not be able to be situated here" (§36) (translated by Dillon and Gerson). Proclus doubts that matter is evil since it "offers itself for the making of the entire universe" (§32). Hypothetical necessity is a crucial idea in Proclus' account of evil: he argues that there is a kind of evil that needs to exist for the universe to be good. Destruction of mortal beings is one such evil: there has to be destruction if there is to be generation, and "if there is no generation, the entire universe will be imperfect" (§5). This is a clear application of Aristotle's idea to the *Timaeus*' cosmogony, exactly the context in which *sunaitia* were first introduced by Plato.

coming-to-be of something. ⁴⁶ I agree that some of Plato's *sunaitia* meet (1), but not all of them do. (2) is the heart of Plato's concept. Further, the technical language of hypothetical necessity carries too much Aristotelian baggage that Plato does not endorse, as I shall argue now; thus we can say that some of Plato's *sunaitia* are necessary for something else to exist, but we have good reason not to import *hypothetical necessity* as such. ⁴⁷ I maintain that this is embedded in a larger mistake: it is incorrect to think of Plato's views in terms of Aristotle's fourfold causal schema.

Aristotle uses *sunaition* in *De Anima* to refer to either the material cause or something that belongs to the material cause, and in the *Physics*, he explains hypothetical necessity as involving material causation. The material cause, he defines, as *that out of which* something comes into being (*ex hou ti gignetai*), such as the bronze of a statue (*Metaphysics* V.2 1013a24–25). Let us consider whether Plato's examples meet this description. There is the case of the *sunaitia* of fingernails being the sinew, skin, and bone, and this is plausibly an instance of material causation, since these are the things out of which fingernails are composed. There is the case of the fire in the eyes that makes vision possible, which is said to be the *sunaition* of sight (45b; 46e). This is not the same sense of material causation, but perhaps it is still material causation in an extended sense. ⁴⁸ Even still, the concept of material causation explains nothing about the *Statesman*'s usage of *sunaitia* at all. The *sunaitia* of the art of weaving are the tools or those crafts that furnish its tools,

⁴⁶ We observe the second condition only when we read examples of Aristotle deploying this concept, such as in the *De Anima* passage. We would miss it if we focused exclusively on the *Metaphysics* passage where *sunaitia* are apparently identical to that-without-which-not (*hou aneu ouk*). If only the first condition held, then time, space, and countless other things would be *sunaitia*.

⁴⁷ In a way, Plato does unpack his own idea of *sunaitia* in terms of necessity, too (i.e., that they are those things once set in motion by necessity but now moved by that which possesses *nous*). Yet, when we are talking about necessity as something persuaded by *nous* in the *Timaeus* (e.g., 48a), we are talking about a different *kind of thing* than Aristotle's hypothetical necessity, since what one might call Platonic cosmic necessity is a source of motion in things (cf. *Tim* 46d-e), whereas there seems to be no way for hypothetical necessity to *move* anything. It seems that they are in different ontological categories altogether.

⁴⁸ For material causation in an extended sense, consider the sense in which premises are the matter of an argument, the people the matter of a *polis*, and the genus matter of the species. Perhaps it is similar to Aristotle's claim that boiling blood around the heart is the matter (*hulē*) of anger (*De Anima* I.I 403a29-403b2). If Aristotle means that the boiling of blood *brings about* our feeling angry, and that this is a material cause, then the fire inside our eyes that Plato thinks is a *sunaition* of vision might count as a material cause too in this same sense. It is not clear whether Aristotle means this in *DA* I.1 anyway. He could mean that blood boiling is a natural-philosophical or materialistic *definition* of anger, not that it brings about anger. See Happ 1971: 572ff. for a discussion of matter as included in something's definition and "die für Naturforscher typische Begriffsart und Definitionswise."

nothing that we could say is that out of which something is composed even in some extended sense (281c).⁴⁹ In contrast, some scholars have said outright that Plato's *sunaitia* are material causes; however, I do not think that this can be maintained in the face of all of the *Statesman*'s examples and on any plausible interpretation of the *Timaeus*' example of sight and fire.⁵⁰

There is another explanation that makes sense of the *Statesman* and makes better sense of the *Timaeus*' examples, as well as the *Laws*' discussion: a *sunaition* is a mere tool or instrument. There is not obviously a that-out-of-which in Plato's ontology. ⁵¹ Instead of working with matter as such, the Demiurge finds and then adds order to the disorderly *khōra* (space). ⁵² God is acting on and shaping *space* such that the things that are in it are useful to and contribute to the perfection of the cosmos.

52 It is a crucial difference between these two thinkers that Aristotle thinks of matter as passive, whereas Plato identifies space with the wandering cause that is active in its own right (*Tim* 53b). It is due to the disorderliness of space that Plato posits a principle that can correct the disorder. However, see Happ 1971: 776 for a dissenting view, maintaining that Aristotle does think of matter as partly active and that the Aristotlelian concept is borrowed from the early Greek philosophers, "durch die Vermittlung Platons und der Akademie." He argues that later thinkers over-emphasized the passivity

⁴⁹ In a cosmological setting where the gods can use only matter to achieve their aims (42e-43a), it is naturally difficult to tease apart what Plato is referring to when he talks about a *sunaition*. The *Timaeus*' examples might make it seem that something is a *sunaition* because it is the matter (straightforwardly in the case of nails, and then perhaps in some extended sense of matter in the case of the eyes), but the *Statesman* makes it clear that it is something's status as a tool that makes it a *sunaition*. That being said, it might well be that the case of the eyes in the *Timaeus* cannot be subsumed under the concept of Aristotelian material causation even in an extended sense, which would mean that we do not even have turn to the *Statesman* to establish this point.

⁵⁰ E.g., Taylor 1928: 539 says that in the *Timaeus*, *sunaitia* are "the constituents, the 'material cause', in Aristotelian language [...] as opposed to the [...] final cause, which alone deserves the name of *aitia*." This sums up the position to which I am opposed: *sunaitia* are not material causes, and we should reject attempts to project Aristotle's causal framework onto Plato.

⁵¹ My point here is merely that Plato does not have a conception of matter *as such* and that it is important for our understanding that, as he says, "the third type [alongside the Forms and sensible objects] is space" (*Tim* 51b). There is a wide body of scholarship on how to understand the receptacle in Plato, especially its relationship to matter. The interpretative debate centers around whether the receptacle features in the composition of bodies (i.e., whether it provides that out of which bodies are made). The argument in this article does work better with the so-called spatial interpretation on which the receptacle does *not* feature in the composition of bodies, although the point I am making is meant to side-step this debate: even if Plato thinks that the receptacle does feature in the composition of bodies, it is nevertheless important that he thinks that it is *space* that so features and that there is no distinct conception of matter. (If Plato thinks that space features in the composition of bodies, that is clearly a very different understanding of material composition than Aristotle's.) Algra 1995: 72–121 gives a survey of the different possibilities (and of Aristotle's criticism). Also see, e.g., Herter 1951, Cherniss 1954, Happ 1971: 85–208, Miller 2003, Zeyl 2010, and Brisson 2011. See especially Harte 2002: 250ff. for an argument that the position that the receptacle is matter is compatible with the position that it is space.

The concept of matter, conceived in its own right, is Aristotle's invention.⁵³ God *uses* the fire in the eyes so that we can see. He *uses* the sinew, skin, and bone for our benefit. Think of the creation of bone: he took pure and smooth earth, soaked it with marrow, and then dipped it in fire and then water multiple times (73e). We never observe the Demiurge making something *out of* something else, but instead merely *using* something to promote some outcome.⁵⁴ This is same sort of relation that holds between the statesman and the art of building: he applies it when and where it is appropriate for the purpose he has in mind, namely, defense (*Statesman* 288b–c).⁵⁵ The remark (287b–d) that it is difficult to identify the *sunaitia* of something because it seems like anything can be or is the tool (*organon*) of something else reflects the imprecision of *sunaitia* as a category, which explains its later reception, as we shall see in the third section below.

It would be more precise for *sunaitia* to be hypothetically necessary. I do not think that this is Plato's view. Specifically, I disagree with Thomas Johansen's claim that *sunaitia* are both necessary conditions and the tool that is required for the job at hand. ⁵⁶ There are some passages that do identify necessary conditions. For instance,

of Aristotelian matter, especially in the medieval period, in order to conclude that matter was not a "Gegenprinzip Gottes."

⁵³ Plato believes that space plays the role of *that which persists through change*, a hallmark of Aristotle's concept of matter. The analogy with gold at *Timaeus* 50a-b illustrates this feature of the receptacle. Persisting through change, however, is distinct from being that-out-of-which.

⁵⁴ I thank an anonymous reviewer at *Apeiron* for pointing out an important distinction between the instances of *sunaitia* in the *Timaeus* and in the *Statesman*. In the former, the final products (e.g., our nails) have the features of the *sunaitia* that contributed to their creation. In the latter, there is no similar transference of features; for instance, a weaver's finished products do not share the same features as the weaver's tools (i.e., the *sunaitia*). The fact that sometimes we can achieve our desired outcomes without transferring the features of the *sunaitia* to the outcome is important for recognizing that not every given *sunaition* is necessary. Moreover, I suspect that the reason for this difference between the two dialogues reflects the circumstances around the cases in them: consider that in the *Timaeus*, we are observing the Demiurge and his allies, the lower gods, choose tools because of the way that they want those tools to transfer their properties to finished products (e.g., they want the hardness of earth to transfer to bone, because bone exists in order that our marrow might be protected).

⁵⁵ Cf. Euthydemus 290b—c, where Plato says that some crafts serve others because they do not know how to use that which they produce; they thus hand over their product to be used by the craft that knows how.

⁵⁶ See Johansen 2020: 109. This conjunction—that *sunaitia* are necessary conditions *and* the tool that is required for the job—is important. Johansen 2004: 103–106 distinguishes between *mere* necessary conditions and *sunaitia*, claiming that the latter are those that, in addition to being necessary conditions, "contribute to an end." The articulation of this thought in Johansen 2020 as a *necessary tool* is, I think, more helpful than thinking of a *sunaition* as contributing something, even though I disagree that *sunaitia* are necessary. When we consider the role of the soul as a self-mover, *sunaitia*

the Demiurge decides to create every visible living thing because "if they do not come into being, then the cosmos will be incomplete ($atel\bar{e}s$); for it does not have in itself all the living things that it is required to have if it is to be sufficiently complete [mellei teleos $hikan\bar{o}s$]" (Tim 41b–c). Note that Plato does not say that the visible living things are sunaitia, but perhaps they count. ⁵⁷ For the Demiurge and lower gods do make living things by taking over pre-existing motions in order to promote some outcome. Further, this is an instance of hypothetical necessity in the plain sense, if we overlook Aristotle's underlying conceptual baggage: living things are necessary for the perfection of the cosmos.

It is wrong to generalize from this example. For Plato's two explicit examples of *sunaitia* in the *Timaeus*—the cases of vision and nails—do not ever mention necessity. They mention only usefulness: namely, that the *sunaitia* are useful for achieving the aim that gods have laid out for themselves. Of course, we do see the gods carefully choosing their materials, making sure that the tool *is* well-suited for the job, which all craftspeople must do, as Plato notes in the *Cratylus* (398c). For instance, when the gods are determining how to construct our hair, they settle on material that provides us with shade in the summer and shelter in the winter without obstructing our thought at all (*Tim* 76d). However, it does not follow that this material was *necessary*; moreover, Plato does not *say* that it was necessary. He gives no reason at all for why the gods chose to use sinew, flesh, and bone to construct nails, let alone a reason for thinking that they were the *required* materials. We can conclude from

do not contribute anything, really. It is the soul that transmits motion and directs the *sunaitia*. Carpenters do not often say of their hammers that they *contribute*: usually we say that only things that are active in their own right contribute (e.g., a wealthy donor may *contribute to the carpenter*, but a hammer does not). Plato's view is that it is the agent who contributes to the tool order and direction to promote the agent's intended outcome. There is a sense in which a carpenter might say 'I contribute to the hammer; it does not contribute anything; it is *passive* without my activity'. (This carpenter is not speaking about the pre-cosmic context in which matter is *not* passive; but in our ordered world, our tools do nothing unless we use them.) This is one reason to reject the translation 'contributory cause', although there are some non-Platonic contexts where it is appropriate, as we shall see below, since some later philosophers do think that *sunaitia* contribute to an outcome.

⁵⁷ It might be strange to think of living things as things that would otherwise be moved by necessity, such that they fit the account of *sunaitia* presented in the *Timaeus*, but this is surely true of their bodies.

⁵⁸ I emphasize that I do not deny that we can find examples of something being necessary *for* something else in the *Timaeus*. For instance, Plato says that souls are embodied "by necessity" (42a), clearly not referring to the cosmic principle of Necessity that *nous* persuades but instead to the need for them to be embodied *if* the cosmos is to be perfect. What I deny is that we can call these cases 'hypothetical necessity' and have in mind the term with Aristotle's conceptual baggage: e.g., Strange 1999: 412 says that the *Timaeus*' set of categories "corresponds closely with Aristotle's distinction between absolute and hypothetical necessity."

the Demiurge's good nature that they were useful for the promotion of his plan. Let us also think of the eye example. It is possible that there was some other way for us to ascertain the orderliness of the cosmos (which, of course, is the reason why the gods deign to give us vision). The world-soul, after all, is aware of sensible things but does not have bodily organs (33c; 37b).⁵⁹ Even if we thought that whatever means by which the world-soul does this was closed to us (which Plato does not say), it would not follow that there was no other way, such that eyes were necessary. Consider that the ears are constructed for the same reason as the eyes, namely, in order to provide us with orderliness that we can reproduce in our souls. That is why he begins his discussion of hearing by saying "concerning sound and hearing, the same account holds" (Tim 47c). In fact, as we have seen before, Plato himself notes that his idea of sunaitia is sufficiently imprecise that it is difficult to discern what is a sunaition of what, since everything seems to be a tool of something else; this seems to confirm that Plato is committed to the weaker claim that *sunaitia* are merely tools, rather than necessary conditions and the required tool. They might be required in some cases, but there is no reason to think this is always the case.

Perhaps the most credible passage that someone interested in the hypotheticalnecessity position can cite, as Johansen does, is from the *Statesman*:

Visitor: Of some coming-to-be, there is a *sunaition*, and there is the cause itself. (Young) Socrates: What do you mean?

Visitor: *Sunaitia* are those that do not produce [*dēmiourgousi*] the thing itself, but that provide to those that do produce it tools [*organa*] that if they were not present, they could never perform their assigned [*prostetagmenon*] work, whereas those that complete the thing itself are causes [*aitiai*] (281d–e).⁶⁰

There is much to say about this passage.⁶¹ First, although this text says that *sunaitia* are those things that provide an art with the tools necessary for carrying out its work, I do not think that this is intended as a definition of *sunaitia*. Plato does something similar in the *Philebus* with the claim that "when the elements we were just now speaking about are gathered together (*sunkeimena*) into a single unit, we call that a body (*sōma*)" (29d). This reads as a definition of 'body', except that Plato calls fire, water, earth, and air on their own, not gathered together, bodies (e.g., *Tim* 53c).

⁵⁹ See Reydams-Schils 1997 (especially 263) for more on the world-soul's grasp of sensible objects. For the world-soul's cognition in general, Betegh 2018 and Corcilius 2018.

⁶⁰ It is hard not to read the verb *dēmiourgeō* in this passage without having in mind the *Timaeus*' theory of the Demiurge, in the light of which *sunaitia* were first introduced as such (46c).

⁶¹ As well, consider the passage from the first section: without the *sunaitia* that furnish the relevant tool (e.g., the art of building providing walls), "neither the city nor the statesman's art could ever come to be" (287d).

Similarly, in the *Statesman*, the claim about *sunaitia* is weaker than a definition. After all, some *sunaitia* have nothing to do with providing tools for crafts; every instance of the term in the *Timaeus* is an example. The strong claim that Plato is committed to in the *Statesman* makes sense in light of the context: the statesman's art really *could not* come to be without the things delivered to it by, say, the art of the builder. The defense of the city is necessary for the statesman's art to function, but this is not a claim about all *sunaitia*.

Second, even then, this does not hold for every instance in the dialogue. Amusement is an important part of city life, and the art of painting is a *sunaition* in the sense that it provides the statesman with the tools to promote amusement, but painting is not itself necessary for this; we can cite music as well (288c). It is important not to be misled in the same way that one might be misled by the *Philebus* into thinking that only composites of the elements are bodies. Indeed, this important passage at Statesman 281d-e follows a discussion that is replete with counterexamples to this apparent definition. Plato has just identified clothes-mending as a sunaition of weaving because it is an art that cares for that which weaving produces, namely, clothes (281b). He moves to a discussion of arts that produce the tools of other arts only after looking back on arts that care for the products of other arts by saying "besides, in addition to these [pros tautais eti]," arts that produce the tools of other arts are sunaitia (281c). Clearly, clothes-mending is not necessary for weaving, which shows that *necessity* is not characteristic of the *Statesman*'s conception; further, there seems to be a more generic notion of service in the identification of clothesmending as a sunaition.

This notion of service points to what might be the closest thing to an outright definition of the term that exists, found in the first occurrence of the word's technical meaning: "so, all of these things are *sunaitia*, which God uses as his servants when bringing about the character [*idean*] of what is best [*aristou*] as much as possible" (*Tim* 46c). If we replace 'God' with 'any craftsperson', then we are told that a *sunaition* is whatever a craftsperson uses when trying to bring about what is best, which we know is what all crafts aim at, in Plato's view.

It is misleading that Aristotle treats *sunaition* as a necessary condition. His usage of the word makes it sound like it is that-without-which-not from the *Phaedo*, whereas the *Timaeus* removes *necessity* from that concept and replaces it with usefulness. Those who follow Aristotle in associating *sunaitia* with hypothetical necessity are able to see an interesting *growth* of this concept from the *Phaedo*: they see Plato as taking a notion of necessity and adding to it an understanding of instrumentality: that this tool is *required* for bringing about that end. On the contrary, Plato is *replacing* the concept from the *Phaedo* with its successor: a tool. There is no textual evidence that this particular tool is required for that particular

end—or at least not in every case. I suspect that this weaker idea of usefulness is, in fact, captured by the prefix *sun* in *sunaitia*. The notion of necessity from the *Phaedo* has been *weakened* to the point of *accompaniment*. That is what we observe in the non-philosophical usage of the term, on which the word means merely 'accomplice'. At *Timaeus* 46e, Plato uses the term *summetaitia* as synonymous with *sunaitia*, and the combination of *sun* and *meta* stresses accompaniment even more strongly: the idea is of something that goes alongside the true, unqualified cause. There are unfortunately no other occurrences of the term *summetaitia* extant in Greek literature, but there is a relevant line in *Antigone*, when Sophocles writes *kai summetiskhō kai pherō tēs aitias* ('I take my share of the blame') (537), said by Ismene when she claims to be Antigone's associate. ⁶² Necessity does not factor into it: *sunaitia* are those things that *are* used for bringing about an end (i.e., that *do* accompany), regardless of whether they are *necessary* for bringing about that end.

There is a certain fluidity to Plato's causal language. It is easy to contrast the *Timaeus*' framework with the *Phaedo*'s, but this might miss the fact that even in the *Timaeus*, the causal language jumps without flinching between describing apparently one and the same thing as a *sunaition*, a *summetaitia*, and an *aitia hupēretousa*. I catalogued in the introduction to this article a list of translations that we see in use today among scholars, perhaps reflecting how difficult it is to pin Plato down, and I have argued that Plato's views do not fit neatly into Aristotle's schema, despite popular scholarly tendencies to assimilate them. Ultimately, this poor fit might be the greatest difficulty in explaining Plato's *sunaitia* as Aristotelian *sunaitia* and hypothetical necessity. As I showed above, for Aristotle, hypothetical necessity is developed out of a contrast between final and material causes, and we see *sunaitia* appear in *De Anima* in a contrast between formal and material causes. Plato carves up the world in a way that makes it a mistake for us to project these terms back to him.⁶³

⁶² This is my translation of the Greek text prepared in Sophocles 1994. Not much more can be said about *summetaitia*, but one might wonder about a version without the prefix *sum-*, namely, *metaition*. This word is not used by Plato in this context, and indeed it apparently never takes on a technical meaning in any philosophical context in antiquity, but Plato does use the word once in *Republic* X (615b), where it seems to mean simply 'joint participant' or 'accomplice,' just as *sunaition* does in its non-technical meaning.

⁶³ Let me conclude this section by responding to a thought that the reader might have had by this point. Maybe Aristotle never meant to say that hypothetically necessary tools were truly *necessary*. It is true that if we removed necessity from Aristotle's idea of hypothetical necessity and left the concept with mere *usefulness* at its heart, then it would be easier for us to assimilate Platonic *sunaitia* to Aristotelian hypothetical necessity. The first problem is that this is not how scholars have explicated Aristotle's idea, and it is precisely the scholarly tradition that I am correcting. Consider, for instance, Johansen 2020: 109's claim that Plato thinks of a *sunaition* as a "a tool required for a specific job." None of the *Timaeus*' uses of the term *sunaition* support that view, and only one of the *Statesman*'s examples does. The second problem is that Aristotelian hypothetical necessity relies on conceptual

3 Legacy

It is striking that there is such a departure from Plato's causal framework among later philosophers. *Sunaitia* are clearly important to him and his view of philosophy: the most prominent discussion of them (*Tim* 46c–e) explains that philosophers must study them, alongside the true causes. As a conclusion to this study of *sunaitia*, I shall examine the later reception of Plato's concept and argue that it was abandoned precisely because of its fluidity and imprecision.

The history of causal language after the classical period is odd: philosophers seem to be pulled in two different directions. On the one hand, they recognize as causes things that no classical philosopher would have so recognized. For instance, Epicurus thought that void was a cause (DL X 44). On the other hand, in opposition to this expansion, there is pushback from others, who seek to restrict the notion of cause. Consider Seneca: he lays out Aristotle's four causes, attributes to Plato belief in the four causes, says that Plato adds to them a fifth cause—the paradigmatic cause, that is, the Forms, described here as the model that the Demiurge looks to in the cosmogony—but seems to have in mind more precisely the (so-called Middle) Platonists' interpretation of Plato. Seneca explains that the Stoics push back against this "throng of causes [turba causarum] denned by Plato and Aristotle" (Epistle LXV 11). ⁶⁴ Seneca argues that if Plato and Aristotle sought to identify all the necessary conditions, then they named too few causes and should have included time, place, and motion as causes. In another sense, they named too many causes, because, as was common Stoic doctrine, only the active cause is the cause in a true, unqualified sense. ⁶⁵

baggage that just does not fit with Plato's metaphysics or even just the examples of *sunaitia*. Aristotle thinks of hypothetical necessity in terms of material causation, but the only use of the term *sunaition* in the Platonic corpus that fits that description is the example of nails. (This flies in the face of commentators who think that *sunaitia* merely are Aristotelian material causes, too: e.g., Taylor 1928: 539 says that *sunaitia* are "the constituents, the 'material cause', in Aristotelian language [...] as opposed to the [...] final cause, which alone deserves the name of *aitia*.") Further, Plato does not even seem to have an idea of *that out of which*, which is how Aristotle thinks of matter and material causation. Lastly, for Plato, if we really had to use Aristotelian language, we would be compelled to say that the true causes are the first efficient causes, which can look like final causes because they aim at what is good. They are the intelligent causes that use *sunaitia*, which are their tools, to achieve their objectives. The true cause is the source of motion, and the *sunaitia* are those things that have been set in motion. There is no need to talk about material causes, formal causes, or final causes at all as we unpack Plato's view.

⁶⁴ This translation is by Richard M. Gummere.

⁶⁵ It is of course tendentious for Seneca to claim that the Stoics deny the throng of causes and endorse *precisely the correct number of causes*. Indeed, Alexander of Aphrodisias says that the Stoics themselves "speak of a swarm of causes (*smenōs aitiōn*)" (*De Fat.* 192.18; translation by R.W. Sharples).

However, this was not *merely* Stoic doctrine. It had come to pervade the other schools. For example, Simplicius in his commentary on the Categories testifies to Iamblichus' framework of causes, saying that Iamblichus believed that the active cause was the cause in an unqualified sense, whereas matter and form are merely sunaitia and not causes (327.10-17). Meanwhile, the model (paradeigma)—presumably, the role occupied by the Forms in cosmogony, as with the Middle Platonists—and the final cause are not causes of the finished product at all but are the causes of the agent's action, such that we should call them relations (pros ti) in the strict sense instead. ⁶⁶ There is good reason for a Platonic focus on active causes, as both Iamblichus and Simplicius are aware (327.9–10).⁶⁷ The reason is that Plato in the *Philebus* says that which is productive (to poioun) differs from the cause (aitia) in name only and that, correctly speaking, they are one and the same thing (26e). Indeed, another important statement of this view comes from Damascius in his commentary on this very section of the *Philebus*, when he explains that "every cause is active [pan aition drasterion]" (In Phil. 114.7). 68 With a focus on sunaitia. this is not particularly remarkable: thinking of the true cause as a maker invites thinking about the status of the agent's tools. The sense of to poioun as a productive, creative, and *making* force squares with this.

In fact, these Platonists are getting at something important: for Plato, *nous* is active in the way that it takes over the motions of bodies and arranges them to a good end, as the *Timaeus* and *Laws* describe. It is mediated by soul as it does this, since soul is that which possesses *nous*. *Sunaitia* fit into this context, in the view laid out here, by being those things set in motion (and thereby used) for the sake of that end. Plato really does think that the true cause is the active cause. It is an innovation to think that the Forms are also causes in an unqualified sense as the Middle Platonists claim. ⁶⁹ Let us recall that when Plato does discuss the Forms as causes in the *Phaedo*, it is only in a second-best sense, precisely because he grasps for but cannot find the Demiurge, an agent who has (or is) *nous*. The *Philebus* shines some light on why Plato does not think that the Forms are true causes: they are not active.

⁶⁶ Note that Simplicius in his commentary on the *Physics* (316.23–26) attributes to Plato belief in *six* causes: the four Aristotelian causes, the paradigmatic cause, and *sunaitia*. This is different from what he attributes specifically to Iamblichus, who apparently thought that the *sunaitia* were identical to the formal and material causes.

⁶⁷ The shift that we see in post-classical antiquity is remarkable, however, and I do not mean to downplay it. Frede 1987 is the classic study of this topic, and he argues that the Stoic influence on thinking about causes is responsible for this shift.

⁶⁸ This translation is mine.

⁶⁹ It does seem important that, as Lennox 1985: 213 points out, Plato in the *Timaeus* does *not* call the Forms causes. *Paradeigmata* are not *aitiai* of the things that they are *paradeigmata* of. The Forms are being replaced as the causes of things in the *Timaeus*.

This passage is also further reason for rejecting the view that the true cause for Plato is merely *the why*. The true cause, being *to poioun*, is part of *the how*. When thinking of activity or productivity in this schema, we might think of the *Laws'* discussion of prime- and secondary-working motions.

What stands out about the Middle Platonists (according to Seneca) and Iamblichus (according to Simplicius) is their adoption of the Aristotelian framework of causes, even with some modifications, such as the addition of a fifth cause and Iamblichus' demotion of some causes. Despite the endorsement of Aristotle's schema, Iamblichus has his own idiosyncratic view of *sunaitia* as the matter and form. This is perplexing since Aristotle develops a contrast between matter as *sunaitia*, on the one hand, and form, on the other hand, in *De Anima* above. Further, it does not seem that Iamblichus could be using the term as Plato did, since Plato uses it as synonymous with 'servant causes', and it is not easy to see Aristotelian formal causes as servants.

Consequently, later thinkers, after Plato and Aristotle, develop their own accounts of sunaitia. We see an example of this beyond Iamblichus when we read Sextus Empiricus. He explains that the majority of philosophers believe that the true cause is the active cause, namely, "that by whose energizing the effect comes about" (PH III 14).70 The majority of philosophers reportedly distinguish between sunaitia and "co-operant" things (sunerga), both of which relate in different ways to the active cause. A *sunaition* "contributes a force equal to that of its fellow-cause towards the production of the effect" (III 15). Sextus' example is that of two oxen drawing a plough, of which each is equally a "cause (aition) of the drawing of the plough" (III 15). It seems, then, that sunaitia are causes in their own right, but only because they together are able to accomplish their effect. Sunerga, meanwhile, are those things that contribute a smaller amount towards the production of an effect; for instance, a child might be a *sunergon* of the drawing of a plough, when the two oxen are doing the overwhelming majority of the work. We get the sense that sunaitia are two causes that accompany each other, hence the sun-prefix; a sunergon complements the cause but does not rise to the level of causation. This is different from Plato's thought, on which a sunaition accompanies but is not a cause. Timaeus 46c-d clarifies that many people mistake one for the other. For this reason, many of the translations identified in the introduction to this article, such as 'contributory cause', 'co-cause', and 'cooperative cause', might work better for the Stoic sunergon or sunaition, but not Plato's ideas. This development in thinking about sunaitia that Sextus reports allows philosophers to name something that

⁷⁰ This translation is by R.G. Bury.

Plato could (or would) have not named. There is nothing in Plato's causal language that would allow him to express the causal relationship between an effect and two equally powerful causes.⁷¹

It is not surprising that later Platonists, such as the Middle Platonists and Iamblichus, understood Plato's causal views through Aristotle's causal schema, even with modifications and additions, when we consider the imprecision of his own vocabulary. This, I think, is the crucial point. It might not have been a matter of seeing Plato's views as needing improvement; after all, it is hard to specify areas of improvement when the vocabulary is so fluid and resists being pinned down. The Phaedo talks about that-without-which-not and the Forms. The Timaeus and Statesman deploy sunaitia, but with a different emphasis (such as the focus on technai in the latter); the former also deploys summetaitia and aitia hupēretousa. The Laws talks about prime- and secondary-working motions, while also, like the Gorgias, using sunaitia in its earlier, non-technical sense. This fluidity alone provides a challenge to the commentator. Further, his concept of sunaitia, as he explains in the Statesman, is itself imprecise: a person can say that anything is a tool of anything else and seem to have said something plausible (pithanon) (287d). In the face of this fluidity and capaciousness, Platonists such as Iamblichus articulate what a *sunaition* is through Aristotle's vocabulary. I maintain that this tendency continues to this day when scholars explain the idea through hypothetical necessity. I maintain also that this is a mistake: Plato lacks the appropriate conceptual background to endorse Aristotle's view of hypothetical necessity, and the idea is more at home in Plato's dialogues especially alongside the picture of the soul as the source of motion in the cosmos.⁷²

⁷¹ Another example of new developments in causal language is from Cicero who, in his *Topics*, distinguishes between two kinds of what we might call *helping causes*. There are those "without which something is not produced, some causes are quiet, inactive, one might say, inert, as place, time, material, instruments, and other things of this type," and there are others that "furnish a preparation for producing something, and add certain things which themselves give aid, although they are not necessary" (59; translation by H.M. Hubbell). The preceding comments (58ff.) give the impression that Cicero is working in the same line of thought that Sextus Empiricus reports (*PH* III 14–15), since both categories stand in contrast to the active cause "which by its own force surely produces that effect which depends on this force." Yet, it is not clear how this distinction fits into the Greek-language debates because Cicero never names these causes. (It sounds like the latter category could be *sunerga* as Sextus describes them, but the former category does not seem to be Sextus' *sunaitia*.)

⁷² Acknowledgments: I am especially grateful to, in no particular order, Lloyd Gerson, Rachel Barney, Jacob Stump, Rachel O'Keefe, and Julia Atack. I am also thankful for the many helpful comments that I received during the peer-review process.

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