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Forms as Active Causes in Plato’s *Phaedo* and *Timaeus*

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Forms as Active Causes in Plato’s *Phaedo* and *Timaeus*

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This dissertation argues that in Plato’s *Phaedo* and *Timaeus*, the forms are active causes. By this I mean that it is wrong to think of them as inert models which are imitated by physical things. Instead, they act on the physical world in such a way as to bring about their likenesses as effects. I begin with a careful analysis of the aetiological passage in the *Phaedo* (95e-106e), where Socrates criticizes the aetiologies of the physicists and of Anaxagoras. This analysis reveals Socrates’ criteria for a proper aetiology and also sheds light on why he eventually identifies the forms as *aitiai* capable of fulfilling these criteria. I then examine arguments against taking *aitiai* to be causes, especially those offered by Gregory Vlastos and Michael Frede. I refute those arguments and draw evidence from the text of the *Phaedo* to show that forms are indeed active causes. I then turn to the *Timaeus*, from which I present evidence that the cosmic Demiurge is intended to represent the active causality of the forms, considered as an interwoven whole. I then argue that the *Timaeus* portrays physical things as images of forms, and that the sort of imagery involved is such that the forms must be causally prior to physical things. This again leads to the conclusion that forms are active causes. Finally, I examine the question of how eternally changeless forms can be causes in a changing, temporal world. I draw the elements of a possible solution from the *Timaeus* and *Statesman*. My conclusion is that in the *Phaedo* and *Timaeus*, Plato truly intends the forms to be active causes, and that this interpretation can withstand the arguments commonly made against it.
This dissertation by Andrew Hill fulfills the dissertation requirement for the doctoral degree in philosophy approved by Jean De Groot, Ph.D., as Director, and by Thérèse-Anne Druart, Ph.D., and Cristina Ionescu, Ph.D. as Readers.

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Note on Italicization

Several parts of this dissertation are concerned with the meanings of words. But sentences about words can sometimes be confusing or look a bit clumsy. Consider the following examples:

Here can is a better translation than should.

Because does not lend itself to substantive usage.

These sentences would be clearer and easier to follow if something were done to signify that the first is about the words can and should, while the second is about the word because. To use the language of analytic philosophy, it would be good to signal when words are being mentioned rather than used. So for the sake of clarity, I will italicize words when they are mentioned, so that the previous examples would look like this:

Here *can* is a better translation than *should*.

*Because* does not lend itself to substantive usage.

This convention is especially helpful when the same word is both used and mentioned in the same sentence. For example:

The passage identifies forms as αἰτία, but does αἰτία truly mean *causes*?

Of course italicization will not always signal the mention of a word, since it can also be used for emphasis, to identify a title or for other purposes. But all mentioned words will be italicized.
Introduction

…we maintain that, necessarily, that which comes to be must come to be by the agency of some cause [ὑπ’ αἰτίου].

-Plato, *Timaeus* 28c

How are forms causes of the things we see around us? For example, what role do forms play in causing a visible frog, or a cedar tree or a panther? It is quite clear in Plato’s writings that forms serve as patterns, but is that the entirety of their causal role? Do they do anything, or are they entirely inert? Is there any sense in which we could call them “active causes?” In this dissertation, I will examine the aetiological role of the forms in Plato’s *Phaedo* and *Timaeus*, and present the case that the forms do not merely serve as inert models of their instances, but that they bring them about in such a way that we may properly call them “active causes.”

Of course, it is rather controversial to say that the forms are truly causes at all. In the original Greek, Plato says that the forms are αἰτίαι. And while αἰτία is most often translated as cause, most modern interpreters are convinced that when the ancient philosophers used the term αἰτία, they did not really intend cause (in the modern sense), but rather reason, explanation, or some other such thing. This idea was popularized by Gregory Vlastos’ 1969 article, “Reasons

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2 In the vast majority of cases, Plato uses the feminine form of the word. So for the sake of simplicity, I will hereafter consistently use the word in the feminine, except when the gender is relevant.
and Causes in the *Phaedo*" and further developed in Michael Frede’s 1980 article, “The Original Notion of Cause.” Prior to the publication of Vlastos’ article, most of the literature took it for granted that Plato’s αἰτίαι are causes, at least in some sense of the word. However, in the time since the article first appeared, most scholars have come to believe that *cause* is a misleading translation. And those who are still inclined to think of the forms as causes are now on the defensive. So an important part of my project will be to show that Plato’s αἰτίαι (the forms) can properly be considered causes.

But what do I mean when I say that the forms are *active* causes? On this point, I am simply adopting the terminology used by Frede in his previously mentioned article. In explaining that the modern understanding of *cause* entails activity, he writes the following:

…”the sun or a billiard-ball can interact with other things, it can affect them and act on them so as to produce an effect in them. Quite generally our use of causal terms seems to be strongly coloured by the notion that in causation there is something which in some sense does something or other so as to produce or bring about an effect…. there is a strong tendency to conceive of causes as somehow active."

So, by Frede’s account, an active cause is active in two ways. First, it does something itself. And secondly, by doing what it does, it also acts on another thing in such a way as to produce or to bring about an effect. An active cause engages in some sort of activity itself, and through this activity, it acts productively upon some other thing. It is easy to see both of these elements in Frede’s two examples. The sun engages in the act of shining, and through this, it acts upon the earth, producing the effect of warmth. Likewise, the billiard-ball engages in the act of colliding,

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5 Ibid., 217-8.
and through this, it acts upon a second ball, producing the effect of motion. On the other hand, Frede points out that the Epicurean void could not be considered an active cause. It neither engages in activity itself, nor acts upon anything else. When Epicureans account for how anything has come to be, the void may have an important role in their explanation, but it is in no way an active cause.

So when I claim that the forms are active causes, part of what I mean is that they themselves engage in some sort of activity, i.e. that they do something, acting upon other things in such a way as to produce their instances. In other words, the forms self-instantiate. They produce their likenesses in other things.

The word produce often carries the sense of making something over a period of time. But since the forms are eternal and changeless, they could never engage in that sort of production. So when I ascribe production to them, here and throughout this dissertation, I do not intend to imply any sort of temporal process, but simply the idea that the forms bring about their instances.

This interpretation runs contrary to the now dominant view that the forms are inert, only serving as models for their instances, but not producing them. In several of his dialogues, including the Phaedo, Plato says that particulars “imitate” forms, “participate” in them and “strive” to be like them. And this has led many to believe that in these dialogues, all of the doing of instantiation is accomplished by the particulars, while the forms themselves are inert.

Furthermore, in some of Plato’s later works, such as the Timaeus, he introduces a cosmic Demiurge who looks to the forms as his model, while he is bringing order to the cosmos. Since

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6 Ibid., 218.
the Demiurge is the true agent of instantiation in these dialogues, many see them as evidence that the forms are inert. So in order to show that the forms are active causes, I will need to demonstrate that they have a role in the doing of instantiation, a role which is not entirely taken over by particulars in dialogues like the Phaedo, or by the Demiurge in dialogues like the Timaeus. The need to confront both of these challenges to my interpretation is the most important reason why I have chosen to focus on these two works.

I have also chosen them because, more than any of Plato’s other works, they give explicit, focused and detailed attention to aetiological issues:

…I thought it splendid to know the causes of everything, why it comes to be, why it perishes, and why it exists. (Phaedo 96a)

[That which becomes] comes to be and passes away, but never really is. Now everything that comes to be must of necessity come to be by the agency of some cause, for it is impossible for anything to come to be without a cause. (Timaeus 28a)

The discussion of aetiology in the Phaedo spans four Stephanus numbers (96a-99c). In the Timaeus, the primary concern of the entire dialogue is explaining the coming to be of the cosmos and everything in it, with particular attention given to causal issues at 27d-29a and 50b-51b. Additionally, these two texts have been chosen because they are the foci of the majority of the scholarly work that has been done on Plato’s aetiology. Therefore, concentrating on these texts allows this dissertation to share a starting point with the broader academic discussion of the subject.

But do these dialogues share the same aetiology? The Phaedo is from Plato’s middle period, whereas the Timaeus is a late dialogue, so we might well wonder whether his aetiology has evolved between the two, making it problematic to interpret them together. My own reading

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7 However, there is some degree of aetiological discussion in several other dialogues. For examples, see Greater Hippias 296e ff., Philebus 26e ff., Statesman 281d ff, and the likely spurious Épinomis 983c ff.
is that the aetiologies of the two dialogues are compatible with each other, if not completely identical. However, to the extent that it is possible, I wish to avoid the controversy over how much Plato’s thought may have developed between the two dialogues. So the aim of this dissertation will not be to compare and to contrast the full aetiological systems of the *Phaedo* and the *Timaeus*, but simply to show that Plato thought of the forms as active causes in both. For the most part, I will examine the dialogues independently of each other. However, when I have shown that the forms are active causes in both, the implication will be that, with regard to this one point, Plato’s thought did not evolve in any fundamental or substantial way between the writing of the two works. So rather than assuming any particular connection between the texts, I will demonstrate one.

One might wonder why it matters whether or not the forms are active causes. Why does this question deserve our attention? So before proceeding, I would like to say a bit about the importance of this project.

First, the question of whether forms are active causes or inert is likely to have broad implications for our interpretation of many areas of Plato’s thought. The forms appear frequently in Plato’s dialogues, and often ground his thinking in areas far afield of metaphysics. For example, the *Republic* is a many-layered philosophical onion with the forms at its core. At the beginning, it sets out to answer an ethical question, why should we pursue justice over injustice? But to answer that question, the book peels back a layer of the onion and answers a psychological question, is it preferable to have justice or injustice in one’s soul, in one’s inner order? To answer that question, the book analogizes the soul to a city and then reframes the question as a political one, is a just or unjust ordering of the parts of a city preferable? Does it
matter who rules? The answer to that question depends on whether anyone in the city has true knowledge of what is best for the city, rather than mere opinion. And the answer to that question depends on an epistemological question, is there really a difference between knowledge and opinion in the first place? Finally, the answer to that question depends on the metaphysics at the core of the onion. Forms differ from, and are superior to, sensibles. Because knowledge is directed toward forms, it truly differs from, and is superior to, opinion, which is directed toward sensibles. And since knowledge is superior to opinion, those with knowledge of what is best for the city are more fit to rule it than anyone else. Therefore, the just arrangement of the city, the one in which such persons would rule, is preferable to any of the unjust arrangements in which they would not. By analogy, it turns out that a justly arranged soul, the one ruled by its most knowledgeable part, is preferable to any unjustly arranged soul. And because it is better to have justice in one’s soul than injustice, one ought to pursue justice rather than injustice. In this one book, Plato finds that the forms not only have implications for metaphysics, but also for epistemology, politics, psychology and ethics. So how we interpret his understanding of forms is likely to have consequences for how we interpret his thought in general. I will leave it to the reader to determine exactly what those consequences are. My point is simply that the question of whether the forms are active causes or inert is important, since it is likely to have wide ranging implications for our interpretation of Plato.

Secondly, if the forms are inert, only serving as models for the things in the world around us, then it is not immediately obvious why they should be of interest to anyone but philosophers. For those seeking a deeper understanding of metaphysics, the forms hold an obvious attraction, but why should anyone else care about them? There may be answers to that question, but the
answers are much more obvious if it turns out that the forms are active causes of our day to day experiences. If the things around us are brought about by forms, affected by forms, or even governed by forms, then we should be at least as interested in them as we are in such things as gravity and magnetism. Of course, many people are not interested in those either. But my point is simply that our answer to the question of whether the forms are active causes or inert has implications with regard to the appeal of Platonism beyond the philosophical community. For some people anyway, showing that forms are active causes would amount to showing that they are quite worthy of our attention. And in this dissertation, I will endeavor to do just that.

**Outline**

I will now provide a bit more detail about how the dissertation will be presented. It consists of four chapters. In the first chapter, I will offer an interpretation of the aetiological passage in the *Phaedo*, which appears in that work’s final argument for the immortality of the soul. Socrates says that completing his argument will require a thorough examination of the αἰτία of coming to be and destruction. He then proceeds to give an autobiographical account of his search for this αἰτία, a search that ultimately led him to the forms. By examining the proposed sorts of αἰτίαι that Socrates rejected early on, and his reasons for rejecting them, I will uncover the general shape of the *Phaedo*’s aetiology. This will begin to illuminate Plato’s understanding of the word αἰτία, and will tell us how he arrived at the conclusion that the forms are the true αἰτίαι.
In the second chapter, I will make the argument that in the *Phaedo*, *aitia* is best translated as *cause* and that the forms are *active* causes in this work. Vlastos argues that the ancient Greek word *aitia* had a quite different range of signification than the modern word *cause*, and that therefore *cause* should not be used to translate *aitia*. According to his interpretation, forms are explanatory factors which are relevant to a causal account, but are not causes themselves. However, I will argue that the meanings of *aitia* and *cause* are not as far apart as Vlastos suggests, and that *cause* is the best possible translation. I will also respond to an argument made by Frede, and others, that Plato intends a distinction in meaning between *aitia* and *aíton*, with the former meaning *reason* or *explanation* and the latter meaning *cause*. According to that view, the aetiological passage in the *Phaedo* is broadly concerned with explanations, and only briefly touches on causes as one sort of explanation. Therefore, according to that interpretation, Plato ultimately identifies forms as reasons or explanations, but not as causes. However, I will argue against that interpretation by showing that there is no justification for distinguishing the meanings of *aitia* and *aíton* in this passage.

I will then present evidence for my own interpretation, that forms are active causes of their instances in the *Phaedo*. I will show that Plato uses every linguistic construction available to him to indicate that he is talking about causes. And I will provide further evidence by analyzing the sorts of verbs he predicates of the forms. For example, he says that they come into [*ἐγγένηται*] things (105b-c) and that they bring along [*ἐπιφέρει*] other forms with themselves (104e-105a). Even more significantly, he uses *make* [*ποιεῖ*] and *do/produce* [*εἰργάζετο*] to describe the forms’ involvement in their instantiation:
…nothing else makes [ποιεῖ] it beautiful other than the presence of, or the sharing in, or however you may describe its relationship to that Beautiful we mentioned… (Phaedo 100d)

Now is it oddness that has done [εἰπύξετο] this? - Yes. (Phaedo 104d)

These verbs (and others) suggest that Plato truly saw the forms as active causes of their instances.

In the third chapter, I will shift my attention to the Timaeus, with two foci in mind: 1) the Demiurge and 2) the distinction between being and coming to be. I will explore the identity of the Demiurge and argue that he is best understood as a personification of the forms, considered as a unified network. This will establish that the forms have a productive aspect, and will also provide a link between the Demiurgic aetiology of the Timaeus and the formal aetiology of the Phaedo. Then, in my examination of being and coming to be, I will argue that Plato sees things that come to be as images of things that are. And more specifically, he sees them as the sorts of images which are entirely dependent on their originals. This will show the things that are (the forms) to be causally prior to things that come to be (the things we see around us). And that causal priority will be further evidence that the forms are active causes of visible things.

In the fourth and final chapter, I will respond to the most obvious objection to my thesis. It seems that the forms cannot be causes of the changing, visible things around us since they themselves are eternal and changeless. If the forms were eternal, changeless causes, we would expect their effects to be brought about continuously. For example, if elephants were brought about by the Elephant\(^8\) form, we would expect elephants to be brought about at every moment. But instead, they are only brought about now and then, at some times, but not at others. How could an eternal, changeless cause only bring about its effect intermittently, particularizing it

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\(^8\) Since forms share names with their instances, I will follow a common convention and capitalize the names of forms throughout this work for the sake of clarity.
only to certain times? Aristotle identified this problem in antiquity,\(^9\) and Vlastos used it to argue that Plato could not have held forms to be causal agents, since this would have been too absurd.\(^10\) While Plato does not address this problem explicitly, I will show that a solution to it can be extrapolated from his writings, particularly from passages in the *Timaeus*. This will defend my thesis, that forms are active causes, against the charge that such a view is too problematic for Plato to have held it.

Before proceeding, I would like to offer one final note on my approach to these texts. In interpreting Plato’s work, it can be difficult to avoid anachronistically reading later terminological and metaphysical systems into the text. It is particularly tempting to read Plato’s work as an anticipation of Aristotelianism or of Neo-Platonism. After all, these schools were among his first interpreters, and for many scholars, they are familiar starting points. Additionally, it is often unclear whether or not Plato is using words in some technical sense, and what the precise meanings of his technical terms might be. So Aristotle’s clear terminological definitions offer an attractive, if sometimes inappropriate, means of deciphering Plato’s intent.\(^11\) However, in order to be as objective as possible, I will conscientiously strive to avoid reading these later systems back into his work. Therefore, I will keep comparisons to Aristotle and to Neo-Platonism to a minimum. And except in the few places where I am explicitly invoking them, I will endeavor to read Plato on his own terms.

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\(^11\) DeLacy has suggested that Plato and Aristotle understood causes so differently that it is impossible to explain Platonic causes in terms of Aristotelian causes. Phillip H. DeLacy, “The Problem of Causation in Plato’s Philosophy,” *Classical Philology* 34 (April 1939), 102-3.
Chapter One

Forms as \( \text{Αἰτίαι} \) in the \textit{Phaedo}

In the \textit{Phaedo}, Socrates begins his final argument for the immortality of the soul by suggesting that it will require an examination of “\( \piερι \ \gammaενέσεως \ \kappaαι \ \φθορας \ \tauην \ \αἰτίαν \)” (“the \( \alpha\τία \) of coming to be and of destruction”).\(^1\) This introduces a passage (95e-106d) which, in the entire Platonic corpus, is the longest explicit discussion of aetiology. In this chapter, I will examine Socrates’ discussion of aetiology in the \textit{Phaedo} with three goals in mind. The first is to determine what, according to Plato, constitutes a true \( \alpha\τίαs \).\(^2\) The second is to get a sense of why Socrates’ search for \( \alpha\τίαs \) led to the forms. And the third is to take a preliminary look at how the forms function as \( \alpha\τίαs \) in this dialogue, an issue that will be explored more thoroughly in chapter two.

1. The Final Argument for the Immortality of the Soul (95e–106d)

The development of an aetiology in the \textit{Phaedo} is not an end in itself, but rather a step along the way to another goal. That goal is proving the immortality of the soul. Therefore, Plato’s principal purpose in this passage is not to develop a complete and detailed aetiology, but rather to develop his aetiology sufficiently to support an argument for the soul’s immortality.

\(^1\) My translation. I render \( \gammaενέσεως \) as “coming to be” rather than following Grube in translating it as “generation.” As I will discuss in the third chapter, Plato often treats “coming to be” as indicative of a distinct ontological status, and his use of the term here might have more ontological import than “generation” suggests.
Due to the subordinate nature of the aetiological discussion, it seems appropriate to begin our examination of it with a brief sketch of the broader context in which it appears.

Before the final argument for the immortality of the soul is begun at 95e, Socrates and his interlocutors have already agreed that the soul is very long lasting and that it must have pre-existed its present life. They have also agreed that it is plausible that the soul survives death and is reborn into a new body. However, Socrates has not yet proven to Cebes’ satisfaction that this will indeed happen. It is conceivable that after wearing out many bodies and living many lives, the soul eventually dies. So Socrates’ final task is to show that the soul not only can, but must survive death, i.e. that the soul is truly immortal.

Ultimately, he will do this by showing that the property of life is inseparable from the soul, and that because of this, the soul cannot take on the property of death. But in order to do this, Socrates will first need a general account of how things acquire and lose their properties. This is why, at 95e, he says that this task will require investigating the αἰτία of coming to be and destruction. He then goes on to present this investigation in four phases. First, from 95e to 97b, Socrates briefly explains why he was unsatisfied with the aetiology of the contemporary physicists. This account of his dissatisfaction is important because in it, he indicates his criteria for a satisfactory aetiology.

Then from 97b to 99c, Socrates relates how he got an idea when he heard someone reading from the works of Anaxagoras. The idea was that all things are ordered according to

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2 As I suggested in the introduction, there is a great deal of controversy about how αἰτία ought to be translated. I will take up that question in the second chapter, but until then, I will simply leave the word untranslated.

3 It is interesting that Socrates is seeking the αἰτία of both coming to be and destruction. Since his primary concern is to determine whether or not the soul can be destroyed, it seems that he should only need to seek the αἰτία of destruction and then show that the soul is immune to it. So why does he also seek the αἰτία of coming to be? And why does he assume that coming to be and destruction share a common αἰτία, rather than each having its own? I will comment on these curiosities in the third chapter.
what is best. He was immediately intrigued by the notion of a teleological aetiology, but then disappointed when he found that Anaxagoras’ own aetiology didn’t seem to be teleological at all. This passage is important because it identifies another feature that must be included in a satisfactory aetiology. In addition to the criteria established in the discussion of the physicists, Socrates now tells us that a satisfactory aetiology must include the notion that all things are ordered according to what is best.

Next from 99d to 102a, Socrates articulates an aetiology which is capable of satisfying all of the criteria he has established. In this rather primitive aetiology, which he calls ἀσφαλέστατον (“safest” or “most certain”), the aitia of each effect is the form that shares its name. For example, the aitia of something being good is the Good itself, and the aitia of something being beautiful is Beauty itself. The aitia of each thing is simply its form. Socrates does not tell us how he arrived at this aetiology, and a turn to the forms as aitia seems a bit strange at first. However, I will argue that he turns to the forms because of his interest in teleology, the interest that was inspired by Anaxagoras. The form of each thing serves as a standard of what is best for that sort of thing. So by turning to the forms as aitia, Socrates will be able to conceive of an aetiology in which all things are ordered according to what is best (ideal) for themselves. And in addition to satisfying his desire for teleology, this turn toward the forms will allow him to satisfy all of his other criteria for a satisfactory aetiology as well.

But this safe aetiology is insufficient for Socrates’ broader purpose in the Phaedo, proving that the soul is immortal. It is not yet clear why the soul can’t die. So, from 102b to 105c, Socrates expands on his safe answer with another that he calls κομψοτέραν (“more elegant” or “more refined”). He observes that when some forms are instantiated, they consistently “bring along” certain properties with themselves. For example, every instance of
Fire is hot, every instance of Ice is cold, and every instance of Three is odd. In such instances, Socrates’ more refined etiology states that a form is the αἰτία of whatever properties accompany it in its instances. This means that if we consider the heat of a fiery object, in addition to saying that the αἰτία of the heat is the Hot, we can also say that the αἰτία is Fire. Fire always brings heat along with itself, and therefore Fire is responsible for making the fiery object hot.

At 103c-105c, Socrates observes that whenever a form brings along a property with itself, instances of the form cannot take on the opposite of the accompanying property. For example, because Fire always brings heat along with it, no fire could ever become cold. And because Threeness always brings along oddness, no group of three things could ever become even.

Coupling this observation with the more refined answer, Socrates can now produce an argument that the soul is immortal. Since the soul has a likeness to the forms (established at 79e), he treats it in the same way that he has just treated the forms. Just as Fire always brings heat along with itself, the soul always brings life along with itself. In this respect, the soul is like the more refined sort of αἰτία. And so just as no fire can receive the opposite of heat (coldness), no soul can receive the opposite of life (death). And if the soul cannot receive death, then it can never become dead. In other words, the soul can never die, and therefore it is immortal.¹⁴

A brief outline of the entire argument appears below.

¹⁴ I have intentionally oversimplified the flow of the argument after the point where it has been shown that the soul cannot admit death. I have done so because the correct interpretation of that part of the argument is both controversial and irrelevant to this dissertation. For our purposes, it is only important to see how the more refined approach works and how it is employed in the argument for the immortality of the soul, where it allows Socrates to prove that the soul cannot admit death.
Final argument for the immortality of the soul (95e-106e)
- Search for the αἰτία of coming to be and destruction (95e-105c)
  - Phase 1: Answers of the physicists (95e-97b)
  - Phase 2: Inspiration and disappointment from Anaxagoras (97b-99c)
  - Phase 3: The “safe” answer (99d-102a)
  - Phase 4: The “more refined” answer (102b-105c)
Nothing necessarily accompanied by F will receive ~F (103c-105c)
Application of the “more refined” answer to the soul (105c-106d)
  - The soul is always accompanied by life (105c-d)
  - Therefore, the soul cannot receive the opposite of life, i.e. death (105d-e)
  - Therefore, the soul is immortal (105e-106e)

2. The Aetiology of the Contemporary Physicists

As I have just noted, the discussion of aetiology in the final argument begins with
Socrates’ rejection of the approach of the contemporary physicists, an approach which had
intrigued him in his youth. Examples of the sorts of αἰτία they proposed appear at 96b-97b and
are then revisited at 100e-101c, after the safe answer has been posited. I present these examples
in the following table, grouping them into thematic blocks.

<table>
<thead>
<tr>
<th>Block</th>
<th>Effect</th>
<th>Aitía</th>
</tr>
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<tbody>
<tr>
<td>96b</td>
<td>Living creatures are nurtured</td>
<td>Putrefaction produced by heat and cold</td>
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<td></td>
<td>Human thought</td>
<td>Blood, air or fire</td>
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<td></td>
<td>Senses (hearing, sight, smell)</td>
<td>Brain</td>
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<td>Memory and opinion</td>
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<td>Knowledge</td>
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<td>96c-d</td>
<td>Human growth</td>
<td>Eating</td>
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<td>96d-e, 100e-101b</td>
<td>One man is taller than another</td>
<td>A head</td>
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<td>A head</td>
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<td>Ten is more than eight</td>
<td>Two was added</td>
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<td>Two cubits are longer than one cubit</td>
<td>Two cubits surpass one cubit by half their length</td>
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<tr>
<td>96e-97b, 101b-c</td>
<td>Two</td>
<td>The addition of two ones</td>
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<td></td>
<td>Two</td>
<td>The division of a one</td>
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<tr>
<td>100c-d</td>
<td>A thing is beautiful</td>
<td>Bright color or shape</td>
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Presumably, all of the *αἰτίαι* in these passages are meant to represent the same general approach to questions of aetiology. But we are never told explicitly what it is that unites them all, other than that they are all the sorts of *αἰτίαι* suggested by “that wisdom which they call περὶ φύσεως ἱστορίαν” (96a). The only thing they seem to have in common is that all of the suggested *αἰτίαι* are either material things or processes of material things. For this reason, interpreters often describe these as “materialist” or “physicalist” *αἰτίαι*. But even if there is some sort of loose unity to these examples, there is no mention of any *method* by which the materialists determine *αἰτίαι*. Nowhere are we given any procedure by which one can work backward from effects. And due to this lack of method, Socrates was “often changing [his] mind in the investigation” (96a-b), since for any new aetiological question, there would be no clear way of proceeding to find the answer. In fact, this lack of method seems to have been Socrates’ primary frustration with φύσεως ἱστορία, since the uncertainty of it all even led him to “unlearn” things he thought he had known before, and eventually to determine that he had “no aptitude at all for that kind of investigation” (96b-c).

Of course, under this thin veil of ironic self-deprecation is a very firm rejection of materialism as a dead end. Surely if materialism were a fruitful approach for which Socrates simply lacked aptitude, he would be aware of *someone* who had employed it fruitfully. But he never once provides a single example in which materialism is used unproblematically by himself or by anyone else. Instead, he raises serious objections against materialist *αἰτίαι* at every turn. So in truth, he does not believe that he lacks aptitude for the materialist approach, but rather that the materialist approach itself is hopelessly flawed.

Socrates was unsatisfied with materialism because its lack of method left him constantly changing his mind about the *αἰτίαι* of things. So for him, the most obvious way forward was to
develop a consistent method by which one could work backward from effects to αἰτία. And as we shall soon see, when Socrates developed his safe answer, that is exactly what he did.

For further insight into Socrates’ frustration with materialism, we will now examine the particular examples of materialist aetiology in the text.

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<th>Effect</th>
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Are living creatures nurtured when heat and cold produce a kind of putrefaction, as some say? Do we think with our blood, or air, or fire, or none of these, and does the brain provide our senses of hearing and sight and smell, from which come memory and opinion, and from memory and opinion which has become stable, comes knowledge? (96b)

The proposed αἰτίαι in this passage have several commonalities which bind them together and distinguish them from the examples which will follow. One of the most obvious is that all of them are presented as questions rather than as statements. This may be in order to bring out the point that we have just discussed. Materialism never goes beyond suggesting αἰτίαι, and leaves one questioning and changing one’s mind. The physicists are incapable of answering aetiological questions definitively, so the αἰτίαι they suggest are only hunches or possible answers. This point is further reinforced by the plurality of αἰτίαι Socrates proposes to account for thinking (blood, air, fire, or none of these). When it comes to the aetiology of thought, the physicists cannot even agree on a single most likely αἰτία. They suggest various possible answers, but the question remains open.

It is also striking that, whereas nearly all of the later examples of aetiology are revisited explicitly after Socrates has explained his safe answer, none of the examples in this passage is.
However, the questions in this passage are implicitly resolved in the discussion of the soul, after the more refined aetiology has been proposed. In that later passage, it is said that the soul brings life to living things, and therefore it would presumably be responsible for the processes of living things as well. So these examples serve to foreshadow the discussion of soul.

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<td>96c-d</td>
<td>Human growth</td>
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I thought before that it was obvious to anybody that men grew through eating and drinking, for food adds flesh to flesh and bones to bones, and in the same way appropriate parts were added to all other parts of the body, so that the man grew from an earlier small bulk to a large bulk later, and so a small man became big. (96c-d)

The eating example provides a nice transition from the previous examples to the ones that will follow at 96d-e. Like the examples before it, it involves a process in a living thing. And also like the examples before it, it receives no explicit treatment after the safe aetiology has been proposed, but serves to foreshadow the discussion of the soul. However, this example also resembles those that follow it, in that they will all involve questions of magnitude, either physical or numerical. And as we will see, these questions of magnitude allow Socrates to propose much more precise objections than did his vague criticism of the physicists’ account of sensing, thinking, etc.

In this example, we also see Socrates’ first attempt at giving an account of how, according to the physicists, an aitia is supposed to work. In the previous examples, an aitia was identified, but we were not told how it contributed to its effect. Here, we are told that eating and drinking grow the body by adding to the pre-existing bone, flesh, etc. Presumably, whatever is bony in the food and drink attaches (προσγένωντα) to the bones, and whatever is fleshy attaches to the flesh, so that the food and drink themselves become additions to the previously existing
bone and flesh. In short, we can say that this sort of αἰτία works by proximity and addition. Whatever is to be added to the body is taken into the body (creating proximity), and then absorbed by the body (addition), and this is what we call growth.

We are not yet told what is lacking in this sort of aetiologial account. However, at the end of the account cited above, Socrates asks Cebes whether he finds what he has said to be reasonable, and Cebes says that he does. Then Socrates continues at 96d by saying, “Σκέψαι δὴ καὶ τάδε ἔτι.” The καὶ here suggests that Socrates intends continuity between the example of growth by eating and the ones that follow it. So by working out Socrates’ objections to the succeeding examples of proposed αἰτίαι, we will gain insight into his concern about this one.

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<td>96d-e,</td>
<td>One man is taller than another</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Two cubits are longer than one cubit</td>
<td>Two cubits surpass one cubit by half their length</td>
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I thought my opinion was satisfactory, that when a large man stood by a small one he was taller by a head, and so a horse was taller than a horse. Even clearer than this, I thought that ten was more than eight because two had been added, and that a two-cubit length is larger than a cubit because it surpasses it by half its length. (96d-e)

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5 Constance Meinwald attributes this sort of account of causation to Anaxagoras, to whom the Phaedo later gives special attention. “Such a strategy involves seeing what we ordinarily think of as individuals – the trees and horses, the fish and lakes of our daily world – as composites. For Anaxagoras, these familiar objects are composed of shares or portions of certain basic stuffs, such things as the Hot, the Cold, the Bright, the Dark, Gold, Bark, Wood, Blood, Bone, and so on for a very long list. These shares stand to the composite objects in a simple relation: We can think of them as physical ingredients. Thus if the lake becomes warm we are to think of it as getting an increased share of the Hot…” Constance C. Meinwald, “Good-bye to the Third Man,” in the Cambridge Companion to Plato, ed. Richard Kraut (New York, NY: Cambridge University Press, 1992), 375-6.

6 It has been suggested that all of the examples of materialist αἰτίαι are reducible to processes of addition and division. This position is advocated by Ronna Burger in The Phaedo: A Platonic Labyrinth (New Haven: Yale University Press, 1984), 139. Seth Benardete also endorses it in the introduction to Socrates’ Second Sailing: On Plato’s “Republic” (Chicago: University of Chicago Press, 1989), 1.
In these examples, it is unclear whether Socrates is trying to account for how particular things come to have certain relations between their magnitudes, or why the magnitudes themselves bear those relations to each other. Does he want to know how ten things come to be more than eight things, or why ten itself is greater than eight? This is an important determination to make, because it might tell us something about the sort of αἱτία Socrates is seeking. While we could give a causal account of how a group of ten came to be greater than a group of eight, it isn’t clear that there could be a causal account of why ten itself is greater than eight, since this is a static relation. So in order to maintain that Socrates is searching for causes, I want to show that the examples in this passage are not merely concerned with explaining the static relations between magnitudes.

C. C. W. Taylor has suggested that the example of ten exceeding eight is most likely a conceptual issue, one concerning how the number ten relates to the number eight:

It just isn’t clear what question is meant to be posed in these words. But the answer which Socrates says he had held, and which he later rejected, that ten is greater than eight because it contains two units more than eight, indicates that the question is to be interpreted as ‘What feature of the number ten explains or accounts for its being greater than eight?’

But I find that reading problematic. In the example of ten exceeding eight, the αἱτία is expressed as “διὰ τὸ δύο ὀὐτοῖς προσεῖναι” (96e2-3). Socrates doesn’t simply say that ten is greater than eight because of two, as Taylor suggests, but because of the two having been added (προσεῖναι). If he were merely talking about how the numbers eight and ten relate, it would be strange to say that “two had been added.” Instead, this wording suggests that Socrates is talking about how a group of ten comes to be greater than a group of eight. As in the example of growth by eating,

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8 Further support for this reading can be found in the fact that the next numeric example (the origin of two), discussed at 96e-97b, quite clearly deals with the coming to be of enumerated groups of things and not of numbers.
with which this example is meant to be in continuity, the αἰτία involves proximity and addition. When the groups of eight and ten things were formed, two more were added to one group than to the other. The additional two things were brought into the group and added to it, just as the fleshy part of food is added to pre-existing flesh. And this is meant to account for one group’s magnitude exceeding the magnitude of the other.

Similarly, it is not necessary to think that Socrates only intends to account for why two cubits is a greater magnitude than one cubit. The one cubit is expressed by a substantive adjective, πηχυαῖον, “one cubit long.” Likewise, the two cubit length is a substantive adjective, δίπηχυ, “two cubits long.” So it is reasonable to read this passage as asking what has brought it about that a particular two cubit length is more than a particular one cubit length. Furthermore, the two cubit length is not said to be more simply because of a half of itself, but because of surpassing or exceeding (ὑπερέχειν) the one cubit length by half of itself. Again, this suggests that Socrates is looking for a cause rather than a mere account of a static relation.

And lastly, we need not think that in the examples of the men and horses, Socrates is only interested in why one height magnitude (considered in itself) is greater than another. If that were his concern, then there would be no need to mention that we are talking about the heights of men and horses, since he would only be interested in the heights themselves. As with the cubits, he could simply compare two heights, without specifying what things have those heights. Instead, he not only specifies that we are dealing with the heights of men and horses, but in the case of the men, he even provides the detail that they are standing side by side. So rather than seeking the αἰτία of a static relation between two height magnitudes, Socrates makes it clear that he is themselves, since it speaks of the two being generated by addition or division, bringing things together or taking them apart.
seeking the αἰτία of a particular man or horse exceeding the height of another, a relation which is likely to have a cause.

Having shown this, I would now like to examine the passage in which Socrates revisits the taller by a head example at 101a-b:

I think you would be afraid that some opposite argument would confront you if you said that someone is bigger or smaller by a head, first, because the bigger is bigger and the smaller smaller by the same, then because the bigger is bigger by a head which is small, and this would be strange, namely that someone is made bigger by something small.

Until now, the criticisms of the physicists have been vague. But here, we see two very explicit objections to their answers. The first is that the head is said to be responsible for both the bigness of the bigger man and the smallness of the smaller man. It seems that Socrates will not allow a single αἰτία to have two opposite effects. But interpreted more broadly, it might even mean that he will not allow a single αἰτία to have two different effects, regardless of whether the two effects are opposites. Which of these meanings did Socrates intend?

It is easy to see why it is problematic to attribute two opposite effects to a single αἰτία. I am reminded of a textbook which I read as a child. On one page, there was a list of tips for losing weight, and on the opposite page, a list of tips for gaining weight. Both lists began with “eat breakfast daily.” This struck me as quite odd. If eating breakfast brings about weight loss, then shouldn’t someone trying to gain weight avoid breakfast altogether? And conversely, if breakfast brings about weight gain, shouldn’t someone avoid it when trying to lose weight? And if eating breakfast has no greater tendency to bring about weight gain than weight loss, how can it be responsible for either? More generally, the problem is that if anything can bring about two opposite effects, then it is unclear why, in a particular case, it should bring about one of the
effects rather than its opposite. If we accepted eating breakfast as an αἰτία of weight gain or loss, our aetiological account would still be incomplete, because we wouldn’t yet know why one effect, rather than its opposite, came to be.

As a child, I concluded that the authors of the textbook were simply interested in encouraging everyone to eat breakfast and that breakfast had little to do with weight gain or loss. But as I grew a little older and reflected back on that book, it occurred to me that there is a way in which eating breakfast could contribute to both weight gain and weight loss. Perhaps eating breakfast creates weight fluidity, a greater flexibility of the body either to gain or to lose weight. Opening a window does much the same thing for the heat in a room. When a window is opened, this can lead to the temperature in a room either rising or falling, depending on the relation between the indoor and outdoor temperatures. Opening the window creates a circumstance in which the temperature becomes more fluid. And in the same way, eating breakfast could create a condition in which weight becomes more fluid.

But opening the window and eating breakfast only create conditions in which change can happen. By themselves, they are not sufficient to bring about the desired effect. A complete account of what brought about a change in temperature or weight would need to include something responsible for the change taking the direction that it took. More generally, no αἰτία responsible for two opposite effects can be sufficient to determine which effect will be brought about. It can serve only to create the condition in which some other αἰτία can operate. And that other αἰτία would more truly be responsible for the effect. In fact, this distinction between the

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9 Teloh makes this distinction in his analysis of Socrates’ safe answer. He does not suggest that Socrates intended the broader objection, but only that the safe answer would be able to overcome such an objection. Henry Teloh, “Self-predication or Anaxagorean Causation in Plato,” *Apeiron* 9:2 (1975): 15-23.
roles of true αἰτία and the conditions which make their operation possible is made later in the
Phaedo itself. “Imagine not being able to distinguish the real cause from that without which the
cause would not be able to act as a cause.” (99b)

The same principle can be extended to any case in which something has more than one
effect, even if the effects are not opposites. Rolling a six-sided die can lead to any of six
possible outcomes. However, the act of rolling the die cannot be solely responsible for any
particular outcome, since it does not account for why one outcome is obtained rather than the
others. Rolling the die simply creates a condition in which an outcome will occur, but it does not
determine the particularity of that outcome in any way.11

If I have correctly interpreted Socrates’ objection to a head being the αἰτία of both
bigness and smallness, then the central problem is that if a head no more determines something
to be big than to be small, it cannot (by itself) be responsible for either. The true αἰτία,
therefore, must (by themselves) determine effects, in such a way that whenever the αἰτία of
bigness acts, it will make something big, and whenever the αἰτία of smallness acts, it will make
something small.

A second difficulty Socrates raises in this passage is that a head, which is small, is said to
be the αἰτία of someone being bigger. To Socrates, it seems absurd that the αἰτία of bigness
would be something that is itself small. Here, he seems to be objecting to the opposition
between the effect (bigness) and a property of the αἰτία (smallness). This would allow him to
object to heaviness being brought about by anything that is light, dryness being brought about by
anything that is wet, or brightness being brought about by anything that is dark. But why should

10 This point has been made by Bostock, Baltzly, et al. David Bostock, Plato’s “Phaedo” (Oxford: Clarendon Press,
it be problematic that there is an opposition between an effect and a property of its αἰτία? The answer will become clearer as we examine the next thematic block.

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<td>96e-97b, 101b-c</td>
<td>Two</td>
<td>The addition of two ones</td>
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<td>Two</td>
<td>The division of a one</td>
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I will not even allow myself to say that where one is added to one either the one to which it is added or the one that is added becomes two, or that the one added and the one to which it is added become two because of the addition of the one to the other. I wonder that, when each of them is separate from the other, each of them is one, nor are they then two, but that, when they come near to one another, this is the cause of their becoming two, the coming together and being placed closer to one another. (96e-97a)

We have here the most explicit example of an aetiology of proximity and addition. We are told that the ones “come near to one another” and are “placed closer to one another” when they become two.

It is plain that we are not dealing with the generation of the number Two itself, but rather with the pairing of two particular things so that they come to possess duality. If Socrates had meant to explain how the number Two itself is generated from the number One, we would encounter several absurdities. First, the number One is numerically unique, so there could not be two Ones to bring together. Secondly, even if there were two Ones, numbers have no location, so the two of them could not “come near” to each other, or be “placed closer” to each other. And thirdly, numbers themselves are eternal, rather than generated by any process. So Socrates is clearly not discussing how the number Two itself is generated, but rather how two particular things come to possess duality.

11 Of course, the particularities of how the die is rolled (e.g. the posture of the hand) play a role in determining the outcome, but rolling per se does not.
Socrates appears most troubled by the question of the origin of the duality. Of the two particular items which are brought together, neither possesses duality in itself. Their addition is nothing more than an increase in proximity, and this seems insufficient to introduce any new properties which neither of them previously possessed individually. So what is the origin of the duality they possess when the two are combined?

Ultimately, this problem has its roots in the Parmenidean contention that nothing comes from nothing. Duality cannot suddenly appear where it was not before. And yet, since neither of the original items possesses it individually, this is exactly what seems to happen when they are brought together. Something arises from nothing.

We can now revisit the question of why it is problematic for a head, which is small, to make someone big. If the head is small, then the bigness that it produces seems to come from nowhere. Something arises from nothing, which we cannot allow. Bigness must be produced by something which itself has bigness to impart. Then bigness would come from bigness, and our inner Parmenides could sleep comfortably at night.

The materialist account of the production of a dyad also raises the following difficulty:

> Nor can I any longer be persuaded that when one thing is divided, this division is the cause of its becoming two, for just now the cause of becoming two was the opposite. At that time it was their coming close together and one was added to the other, but now it is because one is taken and separated from the other. (97b)

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12 In the text itself, the present passage concerning the generation of two appears before the passage concerning how a head, which is small, can make someone big. Therefore, it is reasonable to interpret the latter in the light of the former.

13 Of course, this would not be a problem if the head were both big and small at the same time. Socrates clearly recognizes that the same thing can be big and small at the same time (though not in comparison to the same thing). See *Phaedo* 102b. However, the head is here described simply as small, and it is on this point that the problem rests.
The problem here seems to be that two opposite αἰτίαι are provided for the same effect. According to the materialist account, two can be generated either by bringing things together (addition) or by taking them apart (division). This time, the text is quite clear that the objection is not simply that there are two different proposed αἰτίαι, but that these two are opposites. However, it is not clear why this is problematic, or what kind of opposition is required to create the difficulty. Would it be a problem, for example, that both a large dog and a small dog can be responsible for a bite? The two are opposites in a certain respect, but this seems irrelevant to whether bites can be attributed to both. Would Socrates object to both dogs being αἰτία of biting?

The first thing we should notice is that if there is a plurality of possible αἰτίαι for a single effect, even if those αἰτίαι are not opposites, it will be very difficult to determine which one was responsible for a particular instance of the effect. If both addition and division can produce a dyad, then when we come across a particular dyad, it will be unclear whether it was produced by addition or by division. We might be able to have a general knowledge of which set of αἰτίαι goes with which effects, but in any particular instance, the αἰτία is likely to evade identification. However, Socrates’ objection is more precise than this. It has something to do with the fact that the αἰτίαι are opposites. The text does not give us much guidance in interpreting Socrates’ meaning here, but the following is a plausible analysis. Opposite processes tend to undo one another’s work. For example, if a room is brightened and then darkened, the darkening undoes the brightening. And if a load is lightened, and then weighed down, the weighing down undoes the lightening. Therefore, it seems that whatever is accomplished by addition ought to be undone by division, and whatever is accomplished by division ought to be

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14 For a good discussion of types of opposition, see chapter 3 in Bostock, Plato’s “Phaedo.”
 undone by addition. And this is exactly what happens in the production of a dyad. If the dyad is produced by the addition of a unit to another unit, then the dyad can also be dissolved by the division of these units. And if the dyad is produced by the division of a unit, it can also be destroyed by reuniting the parts (addition). But this means that the same thing (either addition or division) can both produce and destroy the dyad. And we have already seen the problem with attributing opposite effects to a single αἰτία. Ultimately, this objection is reducible to the earlier one.

But under what circumstances can this reduction be made? The reduction depended upon the fact that the two αἰτίαι undid one another’s work with respect to the effect. This means that whatever is produced by one of the αἰτίαι would be destroyed by the other. And since both αἰτίαι were said to generate the same effect, each is both a generator and a destroyer of that effect. Thus each of the αἰτίαι has two opposite effects, generation and destruction. So, it ought to be possible to perform this reduction whenever the two proposed αἰτίαι undo each other’s work with respect to the effect.

We now have an idea of what kind of opposition between the αἰτίαι is required to generate the difficulty. And we can easily apply this to our earlier example of the large dog and the small dog both producing a bite. Largeness and smallness undo each other’s work with respect to size, but not with respect to the effect we are considering, namely biting. Neither a small nor a large dog is capable of unbiting a person. Neither works against or undoes this effect. And because the large and small dogs do not undo each other’s work with respect to biting, there is no difficulty in saying that both dogs could be the αἰτία of a bite.
... if someone tells me that a thing is beautiful because it has a bright color or shape or any such thing, I ignore these other reasons—for all of these confuse me.... (100c-d)

We are not told exactly why shape and color are dismissed as αἰτίαι of beauty, apart from the fact that Socrates finds such things “confusing.” But based on the issues which we have previously discussed, we can make an educated guess. The most obvious problem seems to be that there is no color such that all objects of that color are beautiful. In fact, for any given color, it is easy to imagine something which is both that color and ugly. For example, imagine a mutilated human corpse, an image which nearly everyone would agree is ugly. Wouldn’t this image remain ugly, even if we painted it with the most beautiful of colors? Likewise, there is no shape such that all objects of that shape are beautiful; for any shape, we can imagine an ugly example. This means that any particular color or shape could just as easily belong to something ugly as to something beautiful. By themselves, the color and shape cannot guarantee that their possessors will be beautiful, so they are not determinative of beauty. As we have seen before, Socrates requires that an αἰτία be sufficient to determine the particularity of its effect. And in this case, the same αἰτία could result in two opposite effects, beauty and ugliness. But Socrates has denied that an αἰτία could have two opposite effects. So shape and color cannot be the true αἰτίαι of beauty.
Collecting the Objections to Materialist Aetiology

Interpreters often reduce Socrates’ objections to materialist aetiology to the following three:¹⁵

1. It attributes opposite (or different) effects to the same αἰτία.
2. It attributes opposite αἰτίαι to the same effect.
3. It allows αἰτία to have properties opposite to their effects.

However, in addition to these, I have identified the following:

4. It lacks a method for working backward from effects to αἰτίαι.
5. It lacks final resolution to aetiological questions (one is left continually changing one’s mind).
6. It often reduces αἰτία to proximity and addition (or division).
7. It sometimes suggests αἰτία that are not determinative of their effects.
8. It permits something to be generated from nothing.

This list is important because every move that Socrates makes from here onward is an attempt to find an aetiology which is free from these difficulties. By understanding what he is trying to accomplish, we will have a clearer grasp of what he intends in the aetiology he goes on to develop.

3. The Critique of Anaxagoras

After having explained his frustrations with purely material aetiologies, Socrates discusses his encounter with the thought of Anaxagoras. The passage begins as follows:

I do not any longer persuade myself that I know why a unit or anything else comes to be, or perishes or exists by the old method of investigation, and I do not accept it, but I have a confused method of my own. (97b)

This introduction is noteworthy for two reasons. First, it is clear that Socrates has already abandoned the aetiology of the physicists at this point, since he refers to it as the “old method.” So he must have seen something new in the approach of Anaxagoras which made it different in kind from theirs. Anaxagoras is not simply one more physicist. He offers, or at least promises to offer, something new.17

Secondly, in this introduction, Socrates announces that he is about to begin explaining his own method. How then are we to interpret the fact that he goes on to describe the method of Anaxagoras instead? James Lennox expresses a common view when he describes the passage on Anaxagoras as a “parenthetical discussion” which “interferes” with Socrates’ presentation of his own aetiology, and stands in “radical discontinuity” with it.18 Lennox does not suggest that the passage is irrelevant to the remainder of the dialogue, but simply that it is an abrupt departure from Socrates’ promise to relate his own method, and that Socrates does not truly begin to

16 Burnet suggests, and I agree, that Socrates is being ironic when he refers to his method as “confused,” (αὐτὸς εἰκῇ φόρεο). Plato, Phaedo, ed. with intro. and notes by John Burnet (Oxford: Clarendon Press, 1931), 103. It seems to me that the purpose of the irony is to convey the modesty with which Socrates wishes to proceed.


describe his own method until the conclusion of the Anaxagorean passage. In short, Lennox believes that this passage is not part of Socrates’ account of his own method at all, but rather an interruption of that account.

However, Lennox’ reading seems implausible to me. If the passage fell somewhere in the middle of Socrates’ account of his own method, it would be easier to accept that it is a parenthetical interruption. But this supposed interruption comes at the very beginning. Socrates has said only seven words about his own method, “…ἀλλά τιν’ ἄλλον τρόπον αὐτὸς εἰκῇ φύρῳ…,” and then (according to Lennox) digresses to talk about Anaxagoras. Why would he introduce his method at all if he does not intend to talk about it yet? Lennox’ reading makes the placement of this introduction inexplicable.

His interpretation also depends heavily upon his contention that, rather than being in continuity with Anaxagorean aetiology, Socrates’ aetiology is in sharp contrast with it. Anaxagoras proposed a teleological aetiology, but (according to Lennox) Socrates found this sort of aetiology unattainable, and therefore developed his own method in an entirely different direction. Thus he concludes that the discussion of Anaxagoras cannot be a part of the presentation of Socrates’ own method.

However, I argue that the Anaxagorean passage is not an interruption at all, but rather an introduction to the teleological foundation on which the Socratic aetiology will be built. In order to see this, we must first notice that when Socrates discusses Anaxagoras, he actually examines two different approaches to aetiology. The first, discussed in 97c-98b, is the approach Socrates had hoped to find in Anaxagoras (but did not), and the second, discussed in 98b-99c, is the disappointing approach that Anaxagoras actually employed. Much of the confusion that has arisen concerning the role of the Anaxagorean passage can be attributed to a failure to
distinguish clearly between these two approaches. So it will be helpful to spend some time examining how they differ. I will hereafter refer to what Socrates had hoped to find in Anaxagoras as $A_H$ and to what he actually found in Anaxagoras as $A_F$.\footnote{This does not imply that the historical Anaxagoras held $A_F$. For our purposes, it is only important that $A_F$ is the approach attributed to him by Plato’s Socrates.}

Socrates says that he heard someone reading from one of Anaxagoras’ works and was struck by the assertion that “it is Mind that directs and is the cause of everything” (97c). From this single idea, and without yet acquiring any of Anaxagoras’ books, Socrates conceived of $A_H$:

> …it seemed to me good, in a way, that Mind should be the cause of all. I thought that if this were so, the directing Mind would direct everything and arrange each thing in the way that was best. If then one wished to know the cause of each thing, why it comes to be or perishes or exists, one had to find what was the best way for it to be, or to be acted upon, or to act. (97c-d)

To be precise, $A_H$ is simply the idea that all things are ordered in accordance with what is best, so that if we determine what is best for a thing, we will know why it is as it is. $A_H$ is inspired by Anaxagoras’ teaching that Mind directs all things, but I am not including the belief in a directing Mind as part of what I am labeling $A_H$. Obviously we will not see any directing Mind in Socrates’ own aetiology when he presents it later in the *Phaedo*. But what he will preserve in his own aetiology is the basic content of $A_H$, the belief that all things are ordered in accordance with what is best.

$A_H$ is overtly teleological. Since each thing is ordered in accordance with what is best, “the best” serves as a $\tau\epsilon\lambda\omicron\varsigma$ for the ordering of each thing. Two examples are given at 97e:

1. The shape of the earth (flat or round) is so because it is best.
2. The earth is where it is (at the center of the cosmos?) because it is best.

These things are as they are because it is best for them to be that way. And just as this method can be applied to questions of coming to be and existence, it can also be applied to the
destruction of things. We could say that anything is destroyed or ceases to be because it is best for it to be destroyed. Or perhaps we could say that a thing is destroyed by turning away from what is best for it, abandoning its τέλος. Either way, ΑΗ could provide an account of the coming to be, destruction or existence of any given thing in teleological terms.

Now suppose that Anaxagoras had truly developed his method in the way that Socrates had hoped. Suppose that he had explained all things by appealing to a directing Mind, thereby fulfilling ΑΗ, having all things ordered in accordance with what is best. This would have overcome many of the previously listed problems with materialism, as shown in the following chart.

| Problem                                      | Solved in ΑΗ?
|----------------------------------------------|-------------------
| Opposite (or different) effects have same αἴτια | **No.** All effects would be attributed to the same single αἴτια: Mind |
| Opposite αἴτια have same effect              | **Yes.** There would no longer be any opposing αἴτια, since the αἴτια of everything would be Mind |
| αἴτια can have properties opposite to their effects | **Unclear.** Would Mind be responsible for mindless things? For powerless things? |
| No consistent method for working backward from effects to αἴτια | **Yes.** The method would be always to ask why the effect is the best it could be, since this would reveal why Mind ordered it to be that way |
| Lack of final resolution to aetiological questions | **Yes.** The final resolution to any aetiological question would be that Mind has brought about the effect because it is for the best |
| Often reduces αἴτια to proximity and addition/division | **Yes.** Αἴτια would never be explained in this way. |
| Provides αἴτια that are not determinative of their effects | **Yes.** The effect would always be determined by its preferability over the alternatives, i.e. that it is best |
| Permits something to be generated from nothing. | **Unclear.** Unless Mind somehow contained all of its effects within itself (perhaps as ideas), the effects would still seem to come from nothing |

This approach would have been free from at least five of the eight problems, and therefore a step in the right direction. So it is easy to see why Socrates was so enthusiastic about what he believed Anaxagoras was proposing.
However, he soon found that Anaxagoras’ true approach (A_F) made no use of Mind, and therefore failed to employ A_H:

This wonderful hope was dashed as I went on reading and saw that the man made no use of Mind, nor gave it any responsibility for the management of things, but mentioned as causes air and ether and water and many other strange things. (98b-c)

A_F is nothing more than a return to the familiar sort of materialism which Socrates had already rejected. In A_F, Mind does not really serve as an aitia at all. And since Mind plays no role, A_F does not include the idea that all things are ordered in accordance with what is best, A_H, and so it fails to be teleological.

And because A_F is just another materialist aetiology, it makes no progress at all toward overcoming any of the eight previously listed problems. In fact, Socrates explicitly raises one of the same objections against A_F which he had raised against the earlier materialist accounts, namely that it allows the same aitia to have opposite effects. He says that Anaxagoras would explain his sitting in prison by looking to the bones and sinews of which his body is made and the relaxations and contractions of these sinews. He then goes on to say,

… I think these sinews and bones could long ago have been in Megara or among the Boetians, taken there by my belief as to the best course, if I had not thought it more right and honorable to endure whatever penalty the city ordered rather than escape and run away. (98e-99a)

In other words, the very same sinews and bones which A_F says are the aitia of Socrates’ sitting in prison could also have been the aitia of his escape. Therefore, in A_F, the same aitia could have opposite effects.

According to Socrates, A_F also fails “to distinguish the real cause from that without which the cause would not be able to act as a cause” (99b). He identifies the true aitia of his sitting in prison as his determination that it is best for him to be there. His bones and sinews permit this aitia to act, but they are not the aitia themselves. Notice that he has no problem identifying the true aitia of his being in prison. The true aitia is his determination that it is best for him to be
there. This appeal to what is best obviously employs $A_H$, making it clear that he has not abandoned a teleological approach at all. On the contrary, all of the criticism which appears at the end of the passage on Anaxagoras is directed toward $A_F$’s failure to be $A_H$, and not against $A_H$ itself. Contrary to what Lennox says, Socrates never tells us that he was unable to find any teleological $a\iota\iota\alpha$, only that he was unable to find them in the aetiology of Anaxagoras.

Nevertheless, many interpreters\textsuperscript{20} maintain that Socrates gives up on teleology only a few sentences later when discussing the materialists’ inability to explain what holds all things together.

\begin{quote}
…they do not believe that the truly good and “binding” binds and holds them together. I would gladly become the disciple of any man who taught the workings of that kind of cause. However, since I was deprived and could neither discover it myself nor learn it from another, do you wish me to give you an explanation of how, as second best, I busied myself with the search for the cause, Cebes? (99c-d)
\end{quote}

However, we need not read this as an abandonment of teleology. Socrates does not say that he gave up on teleology, but only that he was unable to learn the workings of the truly good and binding cause\textsuperscript{21} from anyone else, since it was absent from the views of $\text{oí πολλοί}$ (99b-c), and he was unable to discover it for himself at that time. So he had to search for the $a\iota\iota\alpha$ in some second best way. In the next section, I will take up the question of how he continued his search.

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\textsuperscript{20} See especially Vlastos and Burger. Vlastos, “Reasons and Causes,” 82-83. Burger, 139-44.

\textsuperscript{21} I take the antecedent of “that kind of cause” to be “the truly good and ‘binding,’” since that phrase appears at the very end of the previous sentence. But it is worth noting that others have proposed alternative antecedents. For example, W. J. Goodrich takes the antecedent to be the particularly Anaxagorean sort of teleology, suggesting that Socrates abandons this in order to pursue some other kind of teleology. W. J. Goodrich, “On Phaedo 96A-102A and on the δεύτερος πλούς 99D,” Part 1, Classical Review 17 (1903): 382. I find this interpretation problematic since throughout 99b-c, Socrates is criticizing the views of $\text{oí πολλοί}$, rather than the views of Anaxagoras. So Anaxagorean teleology has not been the subject of discussion since 99a. John Sallis takes “that kind of cause” as a reference to the materialist aetiology of $\text{oí πολλοί}$, but it is unclear why Socrates would describe his further searching as second best to materialism. And “that kind of cause” has greater proximity in the text to “the truly good and ‘binding.’” John Sallis, “La seconde traversée de Socrate: Le tournant vers le logos,” in Généalogie de la pensée moderne: Volume d’hommages à Ingeborg Schüßler, ed. Michael Esfeld and Jean-Marc Tetaz (Frankfurt: Ontos, 2004), 32.
and why it was second best, but for now it is enough to point out that there is no explicit abandonment of teleology, only a statement that Socrates needs to alter his approach.

And there are at least three reasons for rejecting the notion that Socrates abandons teleology at 99c-d. First, it would be odd for Socrates to abandon his interest in teleology immediately after chastising others for failing to be teleological at 99b-c. Secondly, Socrates has just suggested that the true αἰτία of his sitting in prison is his judgment that it is best. So he has just endorsed the idea that true αἰτία of his situation is teleological. Lastly, as I have already said, if Socrates’ own method doesn’t somehow incorporate Anaxagoras’ approach, then it is difficult to understand why he says at 97b that he is about to tell us of his own method. In fact, it would be unclear why Anaxagoras was singled out for discussion at all.

All of this points to the conclusion that Socrates is not abandoning teleology at 99c-d. Therefore, teleology, specifically the ΑΗ sort in which all things are ordered in accordance with what is best, will still play an important role in Socrates’ own method.

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22 In addition to my three reasons, a fourth can be found in Sedley. “Teleology and Myth in the Phaedo,” *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 5 (1989): 359-83. He has suggested that there is an implicit teleology in the final myth of the Phaedo, which might suggest that teleology has not been abandoned. At 109a in the myth, Socrates mentions the shape and location of the earth, two questions for which he had hoped to find teleological answers in Anaxagoras. Here, Socrates says that the earth’s location and shape account for its stability. According to Sedley, Socrates takes stability to be a good, and it is for the sake of this good that the earth has its size and shape. Therefore, Socrates himself provides a teleology similar to what he had hoped to find in Anaxagoras. Sedley admits that this teleology is not obvious in the text, and Fine has argued that it is not there at all. Gail Fine, “Commentary on Sedley,” *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 5 (1989): 384-98. Because it is unclear that there is a teleological aetiology in the myth, I am reluctant to endorse Sedley’s interpretation.
If Socrates is not abandoning teleology in 99c-d, then what *is* he doing, and in what way is his new approach “second best?” The expression that Grube translates as second best is δεύτερον πλοῦν, which is more literally rendered as second sailing. The connotation of being second best is derived from the idea that if there is no wind, sailors will move the boat with oars. Therefore, their second “sailing” is accomplished in a more laborious, less than ideal way, making it second best. Rather than doing the comparatively light work of turning the masts, the sailors must do the strenuous work of pulling the boat forward, stroke by stroke. But it is important to recognize that a second sailing always has the same destination as the first. When the wind fails and sailors take to the oars, it is because they still intend to reach their original destination. They could simply drift wherever the sea carries them, but instead they take up the much harder work of rowing, since they still hope to make the journey to their original destination. So Socrates’ second sailing indicates a change of approach, rather than a change of goal. He still wants to answer the same questions that he had hoped the physicists could answer, and to find the teleology he had hoped Anaxagoras would offer. But he will have to continue his search in a new way.

He explains his new approach as follows.

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23 The same argument is made in Taylor, 53.


...I thought that I must be careful to avoid the experience of those who watch an eclipse of the sun, for some of them ruin their eyes unless they watch its reflection in water or some such material. A similar thought crossed my mind, and I feared that my soul would be altogether blinded if I looked at things with my eyes and tried to grasp them with each of my senses. So I thought I must take refuge in discussions and investigate the truth of things by means of words [λόγους]. (100d-e)

Kenneth Dorter has observed that Socrates is attempting to avoid two sorts of blindness here, and that they correspond to the two sorts of blindness experienced by the freed prisoner in the Republic’s allegory of the cave. The first is the blindness experienced by those who attempt to look at things with greater brightness than their eyes are prepared to bear, such as when someone looks at the sun during an eclipse. In the allegory of the cave, the freed prisoner experiences this sort of blindness as he turns around and ascends to the surface (515c-516c). He must ascend slowly and allow his eyes time to adjust if he is ever to look upon the sun, just as a philosopher must ascend slowly and allow his soul time to adjust if he is ever to behold the form of the Good. Likewise, in the Phaedo, Socrates’ search for a teleological αἰτία must proceed slowly. If he turns immediately to what is best, his unprepared soul will be blinded, as may have happened to Anaxagoras.

The second type of blindness is what the prisoner in the Republic experiences when he returns to the cave from the surface and, having become accustomed to very bright light, can no longer see in the dimly lit cave (516e-517a and 517d). In the Phaedo, Socrates finds that he experiences this sort of blindness when he turns to things with his eyes and tries to grasp them with his senses. Discussing materialism at 96c, he says that “this investigation made me quite blind,” and at 99b, he compares materialists to “people groping in the dark.”

So in his search for a teleological αἰτία, Socrates will be blinded if he turns immediately toward what is best, but also if he turns toward lowly objects of the senses. Instead, he must turn

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26 Dorter, Plato’s Phaedo, 120-2.
his attention to what he is adequately prepared to grasp and then ascend gradually toward what is best. And this new approach begins with his turn to λόγοι. This allows him to pursue the teleological αἰτία, in spite of the fact that he cannot learn it from anyone else or immediately discover it for himself.

But how is Socrates’ new approach a δεύτερος πλοῦς? How is it second best? An interpretation advanced by K. M. W. Shipton argues that Socrates’ method is second best because it lacks certainty.27 If Socrates had been able to discover αἰτίαι for himself or to learn them from someone else, then he would have had certainty about them. But since (according to Shipton) he could do neither, certainty eluded him. So instead, he settled for a method which merely approaches certainty without ever fully attaining it. And it is in this sense that his method is second best.

Shipton’s interpretation is based almost entirely on a parallel between what Socrates says at 99c-d (quoted at the end of the previous section) and what Simmias says at 85c-d:

...knowledge on that subject is impossible or extremely difficult in our present life... One should achieve one of these things: learn the truth about these things or find it for oneself, or if that is impossible, adopt the best and most irrefutable of men’s theories, and, borne upon this, sail [διαπλέσαι] through the dangers of life as upon a raft, unless someone should make that journey safer and less risky upon a firmer vessel of some divine doctrine.

Simmias is doubtful that we can have knowledge in this life, at least without divine assistance. So when he cannot find knowledge for himself or learn it from another, as second best he will accept the best and most irrefutable of opinions. In other words, Simmias settles for an uncertain opinion whenever the certainty of knowledge is unattainable. Because of the obvious and clearly intentional parallel between 85c-d and 99c-d, Shipton concludes that Socrates is essentially saying the same thing in both. This would explain why shortly after 99c-d, Socrates begins to

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27 Shipton, 33-41.
talk about searching for answers through hypotheses (100a). Hypotheses are simply uncertain propositions, opinions which have not reached the certainty of knowledge.

No doubt, there are parallels between 85c-d and 99c-d, but as Yahei Kanayama has argued, there are also significant differences between them. And these are enough to show that Socrates is not following Simmias down the path of settling for uncertain opinions. Of the distinctions identified by Kanayama, the most obvious is that Simmias’ second sailing is a risky voyage on a raft. By contrast, Socrates’ second sailing is a controlled and pre-planned voyage which first travels the safest route (100d-e). So while Simmias is willing to take on the riskiness and uncertainty of opinion, we do not see Socrates being as willing to take that kind of risk. He still aims at what is safe and reliable. In fact, when Socrates eventually produces his safe approach to aetiology, he gives us no indication at all that he believes it to be uncertain. After all, if it were uncertain, then it would also be unsafe.

To take another point from Kanayama, Simmias considers divine revelation to be a “firmer vessel” than any merely human means of discovery. But Socrates is not convinced by divine revelation until it is tested, as demonstrated in his dealings with the Oracle in the Apology at 21b-c. So again, it is unlikely that Socrates is merely echoing Simmias’ earlier speech. The parallelism between the two passages is clear, but there is divergence between them as well. And so the parallelism is insufficient to show that Socrates is following Simmias in settling for uncertain opinions as second best to the certainty of knowledge.

Furthermore, Socrates does not say that he could not discover any aitia or learn them from another, but that he was unable to discover or to learn τοιαύτης αίτιας, that sort of aitia, the truly good and binding sort. This leaves open the possibility that he has been able to discover or to learn some other kind of aitia, perhaps even with certainty. As I mentioned earlier, Socrates
very confidently identifies the αἰρία of his sitting in prison. So Shipton’s interpretation that Socrates considers his method second best to one with certainty seems unlikely to be correct.

Kanayama has suggested that δεύτερος πλοῦς does not always mean second best, but that it may simply mean “second in time” or “less adventurous.”28 His reading is attractive because according to it, Socrates truly sees his method as better than those that preceded it, rather than as second best to anything. However, Kanayama produces no evidence that δεύτερος πλοῦς can have these alternative meanings. In fact, when he examines the use of the expression elsewhere in Plato and Aristotle, he agrees that the meaning is clearly second best in all other instances. His hope that it might not carry its usual meaning in this one passage is based entirely on a brief statement to that effect from an ancient scholium on the Phaedo.29 But since the only available testimony supporting this variant meaning of the expression is found in a single comment on this exact passage, and since there is no other example of the expression taking this meaning in any Greek text, it seems that Kanayama’s interpretation is nothing more than wishful thinking. Δεύτερος πλοῦς probably does carry its usual sense of second best in this passage.

However, there are at least two ways to make sense of Socrates’ claim that his own method is second best. The first is to dismiss this as an instance of Socratic irony. This reading has been enthusiastically endorsed by John Burnet, who is a distinguished scholar of classical Greek. He not only advances it in his commentary on 99c9, but also in his later comments on 99e5 and 100d3.30 Mary Preus and John Ferguson31 have taken this position as well, as has J. T.

28 Kanayama, 87-9.


30 Burnet, Phaedo, 108-11.

Bedu-Addo. And Panagiotis Thanassas argues that what Socrates lays out in his second sailing is far from being second best. It is, in fact, superior to any other approach, since only this new method has any possibility of reaching the destination. Certainly, Socrates is no stranger to irony, and so it is reasonable to suppose that what we have here is simply a case of Socratic irony.

But there is a second way to make sense of Socrates’ claim without dismissing it as irony. Dorter interprets the passage to mean that his first choice would have been to learn of the truly good and binding *αἰτία* from someone else, or for Socrates to discover it immediately for himself. But since this was not possible, he had to pursue it in a more difficult, more gradual way. His own approach will be more laborious, like the sailors taking to the oars. It will require hypothesizing and dialectic, and therefore more effort in order to reach the destination. And in that respect, it is second best.

Eventually, this second best approach, this turn toward *λόγοι*, leads him to a favored hypothesis concerning aetiology. So we will next turn to an examination of that aetiology.

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34 In the *Republic*, Thrasymachus explicitly attests to Socrates’ frequent use of irony. “…that’s just Socrates’ usual irony.” (337a)

35 Dorter, *Plato’s Phaedo*, 120.

36 Plato is rarely dogmatic and it is quite clear that he does not intend for his aetiology either here or in the *Timaeus* to be taken as a final declaration of the truth. In the *Phaedo*, Socrates’ aetiology is a product of the hypothetical method, and Socrates never says that it is anything more than the best of his hypotheses. In the *Timaeus*, the entire cosmological account of the changing world is said merely to be a “likeness” [*εἰκόνα*] of the truth (29b-c). But even though we do not get dogma from Plato, we do get his preferred answers, the ones that withstand his testing.
which is developed in two stages: the answer Socrates describes as ἁσφαλέστατον and the one he calls κομψοτέραν.

5. The Safe Answer

The safe answer is presented at 100b-102a. It begins with Socrates and Cebes agreeing that there are such things as the Good itself, the Beautiful itself and the Great itself (100b). Put simply, they agree on the reality of the forms. This is no surprise, since the forms have already made several appearances earlier in the dialogue. Socrates then suggests that whatever is beautiful is beautiful by sharing in the Beautiful itself. This means that the Beautiful itself is responsible for the beauty of all beautiful things. Likewise, the Good bears responsibility for all good things, Duality for all pairs, etc. In the aetiology of the safe answer, the αἴτια of each thing is its form. So if there is a red ball, we may say that the αἴτια of its being red is Redness, and the αἴτια of its being a ball is the form of Ball.

But why does the search for αἴτια lead to the forms? Socrates never gives us a clear explanation. However, one reason might be what we have already seen in his discussion of Anaxagoras. Socrates wants to find an aetiology in which all things are ordered according to

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37 Throughout the development of the safe answer, form is expressed by the Greek word εἶδος, which is most literally the look or shape of a thing, but can also convey the sense of type or kind. However, when Socrates begins to develop the more refined answer, he uses both εἶδος and ἰδέα (first at 104b), seemingly interchangeably, but with a preference for ἰδέα. This word more vividly conveys the sense of type or kind.

38 For example, the form of Equality is discussed at 74a-75d, and the end of the same passage also mentions the forms of the Greater, the Smaller, the Beautiful, the Good, the Just and the Pious.

39 Plato does not seem to make any distinction between the forms of substances and the forms of properties, so for him, forms serve equally as the αἴτια of things and of their properties.
what is best. And if we want to know what is best for each thing, it only seems right that we should begin by looking to its form. I will say much more about this in a few pages.

Another clue emerges from a more general consideration of how the forms function throughout Plato’s dialogues. Very often, the aim of a Platonic dialogue is to answer a “What is X?” question. For example, one aim of the Republic is to answer the question, “What is justice?” In Laches, the question is, “What is courage?” And in the Meno, a central question is, “What is virtue?” Each of these questions is really asking what is common to all instances of X, and only to instances of X. What is shared by all Xs? This bears an obvious likeness to the aetiological question of the Phaedo, “What is responsible for something being X?” since all of the Xs would have this in common.

In fact, Blackson has pointed out that the “What is X?” question is explicitly aetiological at Greater Hippias 299e.40 Here, Socrates is attempting to discover “What is the Beautiful [τὸ καλὸν]?” He rejects the notion that the Beautiful consists of visual pleasure on the ground that if that were so, then there could not be beautiful sounds. “…if that were the cause [αἰτία] of its being beautiful, the other – the one through hearing – wouldn’t ever be beautiful.”41 Socrates is clear in identifying the answer to the question “What is the Beautiful?” with the αἰτία of all beautiful things. So the question, “What is the Beautiful?” is an aetiological question in Greater Hippias. Therefore, it should be no surprise that when Socrates is seeking the αἰτία of all beautiful things at Phaedo 100c-d, he identifies it as the Beautiful itself, just as in Greater Hippias.

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41 I have slightly modified Woodruff’s translation. He translates καλὴ as fine, but I have changed it to beautiful to make the connection to the Phaedo’s discussion of beauty clearer.
Dirk Baltzly entirely conflates the search for αἰρίας with attempts to answer “What is X?” questions, simply describing this single unified search as “seeking that on account of which all F things are F.” And not only can both searches be expressed with the same verbal formulation, but two of the constraints Socrates often places on the answers to “What is X?” questions are identical to constraints he puts on answers to aetiological questions in the Phaedo. The first is that a “What is X?” question must have a single answer rather than many. This is clearest in Theaetetus 146c-d, where Theaetetus first answers the question “What is knowledge?” with a list. Socrates objects, saying that he desires only one answer. This same constraint appears in the aetiology of the Phaedo when Socrates complains that the materialists allow a single effect to have two opposite αἰρίας. Socrates requires that these questions have only one answer.

The second common constraint identified by Baltzly is that when X is present in something, that thing cannot fail to be F. This is clearest at the beginning of Greater Hippias, where the question is “What is the Beautiful?” Various answers are dismissed on the ground that it is possible for something to possess each of those properties without being beautiful. So whatever the Beautiful is, all things that possess it will necessarily be beautiful. The same constraint can be found in the aetiology of the Phaedo when Socrates complains that the materialists allow a single αἰρία to have multiple effects. The problem seems to be that this allows the αἰρία to be present in something without bringing about the expected effect. If Baltzly is right in saying that Socrates puts the same constraints on αἰρίαs as on the answers to “What is

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42 Baltzly, 133. Matthews and Blackson make a similar link, but only between the attempt to answer “What is X?” questions and the safe answer, which they describe as a “definitional” aetiology. Matthews and Blackson, 582-3.

43 I admit that the resemblance would be stronger if Socrates had complained that an effect could not have two different causes.

44 Baltzly himself cites this passage as evidence of his position. Baltzly, 133.
questions, and that both searches can be described in the same way, then there is good evidence that they are, in fact, the same search.

So the *Phaedo*’s aetiological passage is not really asking a new question, but the same old “What is X?” question in a more generalized form. Rather than asking specifically why beautiful things are beautiful, or just things just, it asks generally why anything is what it is. This gives us at least a partial explanation of why the aetiological search in the *Phaedo* turns toward the forms. Plato seems to have discovered the forms while trying to answer “What is X?” questions. And so in the *Phaedo*, when he is trying to answer the more general question of why anything is what it is, he simply returns to the same answer which he had developed in earlier dialogues. Each thing is what it is because of its form.

But does this answer really tell us anything? Many interpreters have suggested that the safe answer is somehow hollow or uninformative.\(^\text{45}\) Suppose that we ask the question, “why is this ball red?” and someone answers, “because of redness.” This answer is simply a tautology. In saying that the ball has redness, we don’t seem to be saying anything different from our initial observation that it is red. Saying that the ball has redness doesn’t appear to add anything to what we knew at the start. So, at least on the surface, the safe answer looks rather empty, providing us only with obvious truisms.

However, I think there is a bit more to it than that. The safe answer does not say that the ball is red because of redness, but because of Redness, i.e. because of a form. And this does tell us something that we might not have known when we first asked the question. I can see with my

\(^{45}\) The etymology of the English word *uninformative* makes it an ironic choice for characterizing the safe answer, since the safe answer is the one in which all things are infused with form. However, several authors have used that word to describe the safe answer. For examples, see Teloh, 20, Taylor, 47, and Leo Sweeney, “‘Safe’ and ‘Cleverer’ Answers (*Phaedo*, 100B sqq.) in Plato’s Discussion of Participation and Immortality,” *Southern Journal of Philosophy* 15 (1977): 247.
eyes that the ball is red, but my eyes do not reveal to me the form of Redness itself, which is invisible. The existence of this form and its responsibility for the color of the ball are not obvious. They are not detected by direct observation, and are not contained in my claim that the ball is red. In fact, if the average person asked why the ball is red and received the reply that it is red because of its participation in the invisible form of Redness, that person would most likely consider the answer absurd (at least at first). This means that the average person, when asserting that a ball is red, does not imply that it is red because of the form of Redness. So the claim that there is such an entity and the claim that that entity is responsible for the ball being red really do contain new information, and Socrates’ safe answers are not mere tautologies.

But is the safe answer teleological in the way that Socrates had hoped Anaxagoras’ approach would be? Does it hold that all things are ordered in accordance with what is best? Most interpreters, relying heavily on the belief that Socrates abandoned the search for teleological ἀἰτία at 99c-d, do not look for teleology in the safe answer at all. For example, Julia Annas writes that “it is not teleological…. This is the safest kind of explanation, but goodness does not enter into it, in however weak a form.”46 And even some of those who do believe that Socrates is still seeking teleological ἀἰτία think that he does not find any, at least not before the final myth of the dialogue.47

However, a few interpreters have embraced the idea that the safe answer itself is, in a certain way, teleological. Chief among them is M. J. Cresswell, who even sees more than one


way to find a sort of teleology in the safe answer.\textsuperscript{48} One interpretation, which he borrows from I. M. Crombie,\textsuperscript{49} involves a consideration of the work of the Demiurge in the \textit{Timaeus}. The Demiurge uses the forms as his model when he crafts the cosmos, trying to make the cosmos resemble them as much as possible. Therefore, the forms, which are the \textit{Phaedo}’s safe $\alpha\iota\tau\iota\alpha$, provide the goal of his striving, his $\tau\epsilon\lambda\omega\zeta$. So an aetiology involving both the forms and the Demiurge would be teleological in a way. But it isn’t clear that this would be the same sort of teleology as the one Socrates had hoped to find, the one in which all things are ordered in accordance with what is best. And Crombie’s interpretation requires us to import the Demiurge into the \textit{Phaedo}, which is anachronistic since the Demiurge does not play any explicit role in Plato’s cosmology until the late dialogues. So this interpretation, as it appears in Crombie and Cresswell, seems problematic.

Gail Fine has presented a similar interpretation, but she finds a cosmic craftsman in the text of the \textit{Phaedo} itself:

If there is a worker looking towards Forms in the appropriate manner in the \textit{Phaedo}, then Forms are [final] aitiai in the \textit{Phaedo}. So, does Plato specify a worker? Well, at 105d 3-4 he says that soul brings Life to whatever it occupies; and at 106d 5-7 he mentions an imperishable god and the Form of Life. Though he does not say so explicitly, perhaps god – like the demiurge of the \textit{Timaeus} – brings Life to the cosmos. If god brings Life to the cosmos, presumably it orders things in the cosmos – that’s just what bringing Life to the cosmos would consist in.\textsuperscript{50}

Fine admits that Plato does not spell out how the forms are meant to serve as $\tau\epsilon\lambda\eta$, but suggests that he might be hinting at this role for them nonetheless. So it is at least possible that the forms

\begin{footnotesize}
\begin{enumerate}
\item[C\textsuperscript{48}] Cresswell, 248-9. He presents three different interpretations that point toward teleology in Socrates’ aetiology. The first, borrowed from Taylor (p. 53), suggests that we are supposed to follow a causal chain until we end up at the Good. Since the Good would be at the end of every causal chain, all things would be ordered in accordance with what is best, and therefore the system would be teleological. However, on the same page, Taylor admits that there is no evidence to support this view in the text. Because of the lack of textual evidence, I do not discuss this interpretation, and only present Cresswell’s other two.
\item[C\textsuperscript{49}] I. M. Crombie, \textit{An Examination of Plato’s Doctrines}, vol. 2 (New York: The Humanities Press, 1962), 168.
\item[C\textsuperscript{50}] Fine, “Forms as Causes,” 112.
\end{enumerate}
\end{footnotesize}
are τέλη for the god of the Phaedo, insofar as they serve as paradigms of the order toward which he tries to bring the cosmos as he enlivens it. But it still isn’t clear how this would satisfy Socrates’ desire for a teleology in which all things are ordered according to what is best.

Cresswell’s second way to find teleology in the safe answer is adapted from an earlier interpretation offered by Bluck. Cresswell appeals to the well-known principle of Platonism that particulars strive to be like forms. This principle can be found explicitly in the Phaedo itself, when Socrates says that equal things strive to be like Equality itself:

Our sense perceptions must surely make us realize that all that we perceive through them is striving to reach [ὀρέγεται] that which is Equal but falls short [ἔνδεκστρέφεται ἐκείνῳ] of it…. Then before we began to see or hear or otherwise perceive, we must have possessed knowledge of the Equal itself if we were about to refer our sense perceptions of equal objects to it, and realize that all of them were eager to be like [ὦταν] it, but were inferior [φαυλότερα]. (75a-b)

If equal particulars are “eager to be like” and “strive to reach that which is Equal,” then it is clear that Equality functions as a τέλος for all equal things. And by extension of this principle, the other forms serve as τέλη for their instances as well. Beautiful things strive to reach Beauty, pairs strive to reach Duality, etc. So the form, which is the αἰτία of each thing, is also its τέλος. And if this is the case, then the safe answer indicates a τέλος for each thing.

But what does it mean to say that particulars “strive” to be like forms? This must be a metaphorical use of the word, since it would be absurd to think that two equal lines are somehow working to become more like Equality itself. However, the meaning of the metaphor is not obvious. As I will discuss in the next section, Socrates himself admits (at 100d) that he cannot be very precise about how particulars relate to forms. But we can at least say the following.

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51 He cites “Phronesis ii p. 26 et seq.”

52 The idea that instances strive to reach their forms might seem to imply that the forms themselves are inert. However, in the third chapter, I will argue that when Plato speaks of instances “striving” toward their forms or “imitating” them, he understands this to be equivalent to saying that the forms instantiate themselves.
about the meaning of *strive*. When something strives, it approaches its end, but is not at its end.

For example, a runner who is striving toward the finish line has not reached it, and when he does reach it, he is no longer striving. So part of what Socrates means by *striving* is that particulars take on the likeness of the forms (they are “eager to be like”), but still fall short of them. We can see this if we consider that Equality itself is the standard of what is best for all instances of equality. The instances are said to “fall short of” and to be “inferior” to it. And the explanation of this appears earlier at 74b:

> Do not equal stones and sticks sometimes, while remaining the same, appear to one to be equal and to another to be unequal? …But what of the equals themselves? Have they ever appeared unequal to you, or Equality to be Inequality?

Particular instances of equality fall short of Equality itself because they do not consistently appear to be equal, whereas Equality itself does. So when Socrates says that equal things strive to be like Equality, we cannot be very precise about what he means, but we can say that equal things take on the likeness of Equality while still falling short of Equality.

In this interpretation, it is a bit easier to see that all things are ordered in accordance with what is best. Equality is *better* than all of its instances, and serves as a standard of what is *best* for them. So when things take on the likeness of Equality itself, they are becoming more like what is best with regard to equality. Beautiful things could be considered in the same way. They will sometimes appear to be beautiful, but other times appear to be ugly. However, Beauty itself never appears to be ugly.⁵³ Therefore Beauty itself is a standard of what is best for all beautiful things *qua* beautiful. Things taking on the likeness of Beauty itself are ordered according to what is best with regard to beauty, and so they will have that form as their τέλος.⁵⁴

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⁵³ This point is made explicitly in the *Republic* at 479a-b.

In each case, the form is not only an αἰτία, but also a τέλος, since it is a standard of what is best for all of its instances. So in Socrates’ safe answer, we can see something akin to the teleological aetiology he had hoped to find in Anaxagoras.

We can now see why Socrates began the discussion of his own method with the passage on Anaxagoras. In providing a teleological aetiology, Socrates has begun to fulfill the hope that had been raised when he first encountered the thought of Anaxagoras. He has discovered an aetiology in which the ordering of things is teleological, in the sense of being directed toward what is best. Therefore, we have further evidence that we should not follow Lennox in his claim that the passage on Anaxagoras is a “parenthetical discussion” which “interferes” with Socrates’ presentation of his own aetiology, and stands in “radical discontinuity” with it. 55 And neither should we follow Annas in her claim that the Phaedo’s aetiology is entirely devoid of teleology and that “goodness does not enter into it, in however weak a form,”56 since I have shown that in the safe answer, there is a meaningful sense in which each form is a τέλος and a standard of goodness. Of course, the safe answer is primitive, and it does not allow Socrates to do everything he’d hoped Anaxagoras’ aetiology would do. It cannot, for example, explain the shape and location of the earth. But when Socrates further develops it with his more refined answer, he will be able to do those things as well.

Now that we have found some basis for taking the safe answer to be teleological, we can examine the other ways in which it is an improvement over the materialist αἰτία. First, the materialists allowed that opposite (or different) effects could have the same αἰτία. And this meant that the αἰτία was insufficient to explain why one or the other of its possible effects was

55 Lennox, 197, 202.

56 Annas, 318.
produced. But this is clearly not a problem for the safe answer. The αἰτία is always the form of the effect. Whenever there are two different effects, they will have two different forms, and therefore two different αἰτίαι. So the same αἰτία will never be responsible for two different effects. And the form will be fully determinative of its effect.

Secondly, the materialists had allowed that two opposite αἰτίαι could have the same effect, as when both addition and division result in pairs. But the method of the safe answer will never permit this, since each effect will have precisely one αἰτία, its form.57

Thirdly, the materialists had permitted an αἰτία to have properties opposite to its effect, as when a small head is said to bring about bigness. This problem has not been eliminated by the safe answer, but it has been greatly reduced. If the αἰτία of each effect is its form, then the αἰτία and its effect will share nearly all of their properties, differing only in that which belongs to each qua form or qua particular. So the only time that an effect would be opposite to a property of its αἰτία is when the effect is the opposite of a property of form qua form. For example, the form of Duality (mentioned in the Phaedo) is itself singular, while its effects are the opposite (plural). Or if there is a form of materiality, then that form will itself be immaterial, while its effects will be the opposite (material). But even in these cases, there is an advantage over the materialist approach, in that the problem is limited to a well-defined class of effects, and the oppositions occurring there are anticipated and obvious.

Fourthly, the materialists never offered up any consistent method for identifying the αἰτία of an effect, but the safe answer provides a consistent method of working backward from an

57 The fact that an effect cannot have two opposite αἰτίαι does not prohibit any particular thing from participating in two opposite forms. For example, at 102b, we learn that Simmias is taller than Socrates, but shorter than Phaedo. So he participates in both the Tall and the Short. But the αἰτία of his tallness is the Tall, and the αἰτία of his shortness is the Short. So even though he participates in two opposite forms, none of his particular effects has two opposite αἰτίαι.
effect to its αἰτία. One has only to identify the relevant form. Fifthly, materialist aetiology had always left Socrates questioning, but the consistent method of the safe answer will result in final resolutions to aetiological questions every time. Sixthly, unlike materialist aetiology, the safe answer makes no appeal to processes of proximity and addition.

Lastly, the materialists had allowed something to come from nothing by identifying αἰτία which in no way contained their effects. For instance, they allowed two units which do not possess duality in themselves to be the αἰτία of the duality in a pair. Thus the duality of the pair seems to come from nowhere. But in the safe answer, every effect is contained formally in its αἰτία, so that we will never find ourselves having to say that anything comes from nothing.

Therefore, the safe answer is capable of addressing all of the problems which were raised in the discussion of materialism.

<table>
<thead>
<tr>
<th>Problem with Materialism</th>
<th>Resolved in Safe Answer?</th>
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<tbody>
<tr>
<td>Opposite (or different) effects have same αἰτία</td>
<td>Yes</td>
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<tr>
<td>Opposite αἰτία have same effect</td>
<td>Yes</td>
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<tr>
<td>αἰτία can have properties opposite to their effects</td>
<td>Yes (for nearly all cases)</td>
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<tr>
<td>No consistent method for working backward from effects to αἰτία</td>
<td>Yes.</td>
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<tr>
<td>Lack of final resolution to aetiological questions</td>
<td>Yes.</td>
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<tr>
<td>Often reduces αἰτία to proximity and addition/division</td>
<td>Yes.</td>
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<tr>
<td>Provides αἰτία that are not determinative of their effects</td>
<td>Yes.</td>
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<tr>
<td>Permits something to be generated from nothing.</td>
<td>Yes.</td>
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6. The More Refined Answer

After discussing his safe answer, Socrates presents another answer which he describes as κομψοτέραν, i.e. more refined or more sophisticated. In this section, I will explain why Socrates develops the more refined answer, examine how the more refined answer works and then show that it is not a replacement for the safe answer, but rather an extension of it.
Why did Socrates develop the more refined answer? If the safe answer already satisfies Socrates’ conditions for aetiology (and it’s safe!), then why did he bother to develop another answer at all? Christopher Byrne suggests that the safe answer only deals with the question of what it means to be X, but doesn’t explain how instances of X are brought about.\(^5\) According to him, the safe answer tells us *that* instances result from forms, but doesn’t tell us *how*. So the more refined answer is introduced in order to fill in the gap, to identify the means by which forms are instantiated in particulars.

The problem with Byrne’s interpretation is that in Socrates’ explanation of his safe answer, he *has* already identified the means by which forms come to be instantiated in particulars:

\[
\ldots \text{if there is anything beautiful besides the Beautiful itself, it is beautiful for no other reason than that it shares in (μετέχει) that Beautiful}. \ldots \text{nothing else makes (ποιεῖ) it beautiful other than the presence of (παρουσία), or the sharing in (κοινωνία), or however you may describe its relationship to that Beautiful we mentioned, for I will not insist on the precise nature of the relationship, but that all beautiful things are beautiful by the Beautiful. (100c-d)}
\]

Socrates isn’t quite sure what to call it, but the means by which properties are received from forms is participation.\(^5\) And it is clear that participation *does* account for how things come to be, since he says that nothing “makes” (ποιεῖ) something beautiful other than participation in Beauty. Since the safe answer already provides a means by which properties are received from forms, Byrne cannot be right about the purpose of the more refined answer.

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59 In the previous section, I discussed Socrates’ metaphorical claim that particulars “strive” to be like their forms. I take “participation” to be another way of expressing the same relationship.
A more likely reason for its development is that even if we accept the merit of the safe answer, that X-ness is the αἰτία of x, our senses usually observe other things that are more obviously responsible for x. According to the safe answer, a sponge is wet because of Wetness. But when we actually watch the sponge becoming wet, don’t we observe that it is made wet by water? The safe answer would say that a drink is sweet because of Sweetness. But doesn’t the added sugar also play a part? Socrates must either dismiss such things as fictitious αἰτίαι, or he must find some way to include their role in his account, which is exactly what the more refined answer will do.

But the most important reason for the development of the more refined answer is the role that the aetiological passage needs to play in the larger context of the dialogue. Socrates’ end game is not simply to develop a satisfying aetiology, but rather to prove that the soul is immortal. He wants to argue that the soul must always have life and never admit death. But the safe answer is insufficient to prove this. The safe answer could only connect the soul to its own form, the form of Soul (if there is such a form). So the more refined answer is developed in order to provide a richer aetiology, one capable of establishing an unbreakable connection between the soul and life.

He begins by noting at 103d that fire is always hot and never cold, whereas ice is always cold and never hot. This means that fire is always accompanied by heat, and ice is always accompanied by coldness. Thus with regard to heat and cold, “there is something else that is not the Form but has its character whenever it exists” (103e). Fire is not heat, but always has the

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60Aristotle makes this same point in his criticism of Plato at 335b9-10 in On Generation and Corruption.

61The observation that Socrates needs to connect the soul to life, rather than only to the form of Soul, is also made by Sweeney. Sweeney, “‘Safe’ and ‘Cleverer’ Answers,” 245-6.
character of heat whenever it exists. Whenever there is an instance of fire, it is hot because Fire “brings along some opposite into that which it occupies” (105a). Fire always brings heat along with itself. And in the same way, Ice always brings coldness along with itself.

Given a fiery body and asked why it is hot, the safe answer would only allow Socrates to identify the form of Heat as the αἰτία. But now another answer is possible. Because fire always brings heat with itself, the form of Fire is the αἰτία of heat in a fiery body. In addition to explaining heat by Fire, Socrates gives two other examples of his more refined answer:

I say that beyond that safe answer, which I spoke of first, I see another safe answer. If you should ask me what, coming into a body, makes it hot, my reply would not be that safe and ignorant one, that it is heat, but our present argument provides a more sophisticated (κομψοτέραν) answer, namely, fire, and if you ask me what, on coming into a body, makes it sick, I will not say sickness but fever. Nor, if asked the presence of what in a number makes it odd, I will not say oddness but oneness, and so with other things. (105b-c)

Fever is an αἰτία of sickness, because all fevers are accompanied by sickness. And Oneness is an αἰτία of oddness, because when a one is added to something even, it always brings along oddness with itself.

But what does it mean to say that forms “bring along” such things? I believe the answer will present itself if we examine the relation of the more refined answer to the safe answer. It seems clear to me that the more refined answer does not replace the safe answer, but simply builds on it.62 One reason for thinking that the safe answer has not been abandoned is the emphatic praise Socrates gave it earlier:

… I simply, naively and perhaps foolishly clinging (ἔχω) to this, that nothing else makes it beautiful other than the presence of, or the sharing in, or however you may describe its relationship to that Beautiful we mentioned…. That, I think (μοι δοκεῖ), is (eiō) the safest answer I can give myself or anyone else. And if I stick to this I think I shall never (οὐκ ἐπεθ) fall into error. (100d-e)

Notice that the verbs are in the present tense. So at the time when Socrates says this, he still holds the safe answer to be the surest, and believes that it will never fail him. It would be odd, especially for Socrates, to heap this sort of praise onto an answer that he has already abandoned at the time he is speaking. Socrates is reluctant to say much with absolute certainty, so this kind of hearty endorsement strongly suggests a deep commitment to the safe answer, and that commitment is likely maintained to the end of the dialogue.

Furthermore, we have identified eight aetiological criteria which are satisfied by the safe answer. But in isolation from the safe answer, the more refined answer fails to satisfy three of them. First, it allows two different αἰτίαι to have the same effect. For example, Oneness is said to be an αἰτία of oddness, because it always brings along oddness when it is added to even numbers. But for the same reason, Threeness or Fiveness could be an αἰτία of oddness, since they bring along oddness as well (104a). Likewise, Fever is said to be an αἰτία of sickness, since fevers are always accompanied by sickness. But for the same reason, Cancer could be an αἰτία of sickness, since cancer is always accompanied by sickness too. And in the same way, most other effects could have several possible αἰτίαι. So in isolation from the safe answer, the more refined answer allows a single effect to follow from more than one αἰτία.

Secondly, in isolation from the safe answer, the more refined answer fails to provide any consistent method of working backward from effects to αἰτίαι. For a particular sick person, how could we determine with any certainty what had made him sick? Fever? Cancer? Something else? It might be obvious in some cases, but not in all.

This means that thirdly, in isolation from the safe answer, the more refined answer doesn’t allow aetiological questions to be resolved with definitive conclusions. There will
always be the possibility of changing one’s mind about the αἰτία, based on new considerations or evidence. Therefore, as with materialism, one could be left continually changing one’s mind about the αἰτία.

Considering these problems, I argue that the more refined answer is not meant to replace the safe answer, but to expand on it. Fire does not replace Heat as the αἰτία of heat, but rather adds an additional layer to our aetiology. At 104d, Socrates tells us that some things are “compelled by whatever occupies them not only to contain that thing’s Form but also always that of some opposite [ἐναντίου αὐτοῦ ἠχεί τίνος].” I take “that of some opposite” to mean “the form of some opposite.” So the occupying form causes things to contain both itself and some other form. The form of Fire not only compels its instances to be fiery, but also to contain Heat. And it does this because the forms of Fire and Heat are related in such a way that wherever Fire is instantiated, Heat will be instantiated as well.64 This is what it means to say that fire “brings along” heat with itself. The immediate αἰτία of the heat is still Heat, just as it was in the safe answer. But now the more refined answer allows us to add that, less immediately, Fire is the αἰτία of heat, since it compels its instances to receive Heat. And as long as Heat remains the immediate αἰτία in the refined answer, the refined answer will still satisfy all eight of our aetiological criteria.

Here is another example. The safe answer would only have told us that when something is cold, Coldness is the αἰτία. But the more refined answer takes note that ice is always accompanied by coldness. Whenever Ice is instantiated, it compels its instances to receive Coldness as well. So in a less immediate way, Ice is an αἰτία of coldness.

63 Teloh notes this deficiency in the more refined answer as well. Teloh, 20.

64 Of course, we could not say the reverse, that wherever Heat is instantiated, Fire will be instantiated as well.
The more refined answer also allows us to see how water is an αἰτία of a sponge’s wetness, and how sugar is an αἰτία of a drink’s sweetness. Water is always wet, and never dry. This suggests that Water compels its instances to receive the Wet. Therefore, whenever Water comes into something (e.g. a sponge), it brings along the Wet with itself. So, just as our eyes tell us, water is an αἰτία of the sponge’s wetness. In the same way, we can see that sugar is always accompanied by sweetness, so Sugar compels its instances to receive Sweetness as well. Whenever Sugar enters a drink, it will bring Sweetness along with it. Therefore, sugar is an αἰτία of the drink’s sweetness, exactly as we observe.

But if the safe answer is not being abandoned, then why does Socrates seem to abandon it at 105c, saying that he will no longer give that kind of ἄσφαλῆ but ἀμαθή answer? First, we should note that Socrates continues to describe the safe answer as safe (ἁσφαλῆ), so its safety is not in question.65 But he also says that it is ἀμαθή, which would normally be translated as ignorant. Is he disparaging the safe answer? The word ἀμαθή is derived from μανθάνω, meaning I learn, so that its primary sense is unlearned. But T. Bestor suggests that in this passage, the word might best be translated as “simplistic” or “uncomplicated.”66 Alternatively, Thanassas proposes “plain” or “simple-minded.”67 And I think that these alternative translations capture Socrates’ intention better than the word “ignorant,” with its derogatory connotations. The safe answer only tells us that the αἰτία of each thing is its form. But the more refined answer

65 In fact, the more refined answer is first described as “another safe answer” (105b). [The italics are mine.] If the first answer were no longer considered safe, then the more refined answer would be the only safe answer, rather than another one.


67 Thanassas, 14. He further suggests that Socrates uses the word to convey “ironic modesty” concerning the safe answer, which he still holds to be best.
shows us that, in addition to this, another αἰτία can be identified. The safe answer is unlearned and simplistic, not because it is wrong, but because beyond it, there is more to be said.

So why does Socrates say that he will no longer give that kind of answer? I suggest that he is not making a general statement about how he will answer all aetiological questions in the future, but rather a limited statement about how he will answer them in the remainder of his argument for the immortality of the soul. As I have already explained, the safe answer is not sufficient for completing the argument. This is the primary reason why the more refined answer was developed. So when Socrates stops using the safe answer for the remainder of the dialogue, it is simply because the more refined answer better suits his purposes, not because he has abandoned the safe answer altogether.

With the more refined answer, applied a bit loosely, it is possible to establish a consistent connection between the soul and life. At 105c, Socrates asks, “what is it that, present in a body, makes it living?” The safe answer would have been the form of Life. But we have now seen, in the more refined answer, that some forms (such as Fire, Ice, Fever and Oneness) always “bring along” certain other forms with themselves, so that they too may be identified as αἰτίαι. According to Socrates, souls do something like this as well. Whenever a soul enters a body, it brings Life along with itself. So Socrates concludes that the soul is the αἰτία of life in a living thing.

Of course, the soul is not a form, but it has a certain likeness to forms. Earlier, at 79e, Socrates established that “the soul is altogether more like that which always exists in the same state rather than like that which does not.” And because of the soul’s likeness to forms, Socrates can apply the same analysis to the aetiology of the soul that he applies to the aetiology of forms.
He says that the soul is the \( \alpha \)\( \iota \)\( \tau \)\( \alpha \) of life, just as Fire is an \( \alpha \)\( \iota \)\( \tau \)\( \alpha \) of heat. Because Fire always brings Heat along with itself, no instance of fire could ever be cold. The fire could not remain a fire while taking on a property opposite to what always accompanies its form.\(^{68}\)

Similarly, because the soul always brings along Life with itself, nothing with soul can admit the opposite of Life (Death). And because nothing with soul can ever admit Death, the soul is immortal. In this way, the more refined answer has fulfilled the goal of the aetiological passage. It has facilitated a demonstration of the soul’s immortality.

The passage has also fulfilled, in a way, the hope that was raised when Socrates first encountered Anaxagorean aetiology. Each thing is ordered according to what is best. In Anaxagoras, the principle of Mind would have ordered all things in accordance with what is best in an absolute sense, but we will not see Socrates approach that sort of account until our examination of the *Timaeus*. Instead, his account in the *Phaedo* shows that each thing is ordered in accordance with what is individually best for itself. In the safe answer, all things are ordered according to their forms, which serve as standards of what is best for their instances. And this is still true in the more refined answer. But just as we can now say more about aetiology, we can also say more about teleology. Not only will things be ordered according to their own forms, but also according to whatever other forms those forms bring along. So, for example, Socrates could now account for things like the shape and location of the earth by appealing to what is best.

Assuming that the earth has a form, that form would serve as a standard of what is best for the

\(^{68}\) This does not mean that the fire could not take on any properties that are opposite to its current properties. Perhaps the fire is currently burning with high flames, but will later burn with low flames. Maybe it is currently very bright, but will later be quite dim. Perhaps it is a quiet fire now, but will later be roaring. All of these changes are permissible, because the changed properties are not brought along by the form. Being fiery does not bring along any particular flame height, brightness or noise level. But it does always bring along heat, and therefore no fire can become cold.
Earth, *qua* Earth, and it might bring along a particular shape and location. If it does, then the Earth will have its shape and location precisely because it has been ordered in accordance with what is best for itself, i.e. in accordance with its form. And likewise, if we want to know why anything else is the way it is, the answer will be that it is ordered in accordance with what is best for itself, i.e. in accordance with its form, and whatever other forms that form brings along with itself. So Socrates has now discovered what he’d hoped to find in Anaxagoras, an aetiology in which all things are arranged according to what is best.

### 7. Summary

In this chapter, I have examined Socrates’ disappointment with the aetiologies of the physicists and of Anaxagoras, and what this tells us about his criteria for a satisfactory aetiology. I especially emphasized Socrates’ desire for a teleology in which all things are arranged according to what is best. I then speculated about why he turned to the forms as *ἀιτίαι*. The forms were first proposed in conjunction with Socrates’ attempts (in other dialogues) to answer “What is *X*?” questions. And his search for *ἀιτίαι* in the *Phaedo* bears a close resemblance to those attempts, making it quite natural that he would turn to the forms here, just as in the other dialogues. I also suggested that since each form is a standard of what is best for its instances, a turn to the forms allowed Socrates to continue his pursuit of the sort of teleology he had hoped to find in Anaxagoras. I then went on to explain Socrates’ safe and more refined aetiologies, discussing how they satisfy his criteria for a satisfactory aetiology, the role of the forms in each answer, how the more refined answer builds on the safe answer, and how the more refined answer contributes to the *Phaedo*’s final argument for the immortality of the soul. This chapter
has not yet shown that the forms are causes, but has provided a preliminary look at their roles as ἀἰτίαι. Their status as causes will be the subject of the next chapter.
Chapter Two

Are the Forms Active Causes in the *Phaedo*?

In the previous chapter, I began to discuss the role of forms as αἰτίαι in the *Phaedo*. But are these αἰτίαι the sorts of things we would call active causes? In this chapter, I will make the case that they are. As I explained in the introduction, borrowing from Frede’s article, active causes are those which *do* something and thereby produce or bring about an effect in something else. I will argue that forms fit this description, most importantly because of their role in bringing about their instances. But first, I will need to explain and to confront the current majority interpretation, that the forms are not causes at all.

The majority interpretation hinges on the position that αἰτία, as used in the *Phaedo*, does not mean *cause*. However, prior to 1969, when Vlastos popularized this interpretation, the prevailing view was that the *Phaedo*’s aetiology was concerned with causes, in some sense of the word. For example, John Burnet, in his 1911 commentary on the Greek text of the *Phaedo*, freely translates αἰτία as *cause* and never hints that this translation might be problematic. Phillip DeLacy’s 1939 article, “The Problem of Causation in Plato’s Philosophy,” took it for granted that Plato ascribes causation to the forms.¹ And in 1967, J. B. Skemp wrote:

> We must remember that αἰτία never means a previous event related causally to a subsequent, but an active agency of a higher order of reality which is literally “responsible for” the physical event.²

¹ DeLacy, 97-115.

Skemp denies that Plato’s *aírιa* are temporally antecedent causes, since they are causes “of a higher order,” transcending temporal things. The forms require us to revise our understanding of causality, but in saying that *aírιa* have “active agency,” Skemp makes it clear that he not only takes them to be causes, but active causes. And even as late as 1968, the year before Vlastos’ article was published, Allan Bloom wrote the following about the forms in his interpretive essay on the *Republic*:

…they are the causes of the things seen and heard – causes not in the sense that they explain the coming-into-being of a particular thing, but in the sense that they explain its character. The *idea* of man is the cause of a particular man’s being a man rather than a collection of the elements to which he can be reduced.³

Here, we see a more limited sense of *cause*, one that begins to approach the view that Vlastos will advance, but Bloom still sees the forms as causes in some sense. These examples show that prior to 1969, it was uncontroversial to assert that Plato’s *aírιa* (the forms) are causes in some sense of the word. In fact, when Vlastos first published his 1969 article, entitled “Reasons and Causes in the *Phaedo,*” he began it with these words:

There is a passage in this dialogue which has led many scholars – the great majority of those who have translated or discussed it in detail – to think that Plato’s Forms are meant to be causes.⁴

Vlastos tells us that at the time of his writing, the *majority* of scholars held the forms to be causes. But his article goes on to challenge the idea that Plato’s aetiology in the *Phaedo* is principally concerned with causes at all. Vlastos suggests that because our modern understanding of *cause* is so different from the Greek concept of *aírιa*, taking the latter to be the former is a mistake. He argues that Plato’s *aírιa* are only meant to be reasons or causally

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⁴ Vlastos, “Reasons and Causes,” 76.
relevant factors. Forms help to explain why things are what they are, but play no causal role in bringing them about.

Since the publication of Vlastos’ article, the majority has come to deny that the *Phaedo* identifies the forms as causes. And Michael Frede’s “The Original Notion of Cause” has further cemented this view. However, in the following pages, I will walk through the *Phaedo’s* uses of ἄιτιος, ἄιτία and ἄιτιον, explaining how Vlastos et al. have argued that these words do not mean cause, and explaining why their interpretation is incorrect. I will also show that in the *Phaedo’s* aetiology, the forms produce their instances by acting on physical things. And because of this, they should be considered active causes.

### 1. What Kind of ἄιτία is Socrates Seeking?

Socrates begins telling of his search for ἄιτία at 95e, and then discusses his disappointment with the physicists’ approach up to 97b. In this passage, the word ἄιτία appears 6 times.

<table>
<thead>
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<th>Ref.</th>
<th>Text</th>
<th>Gender</th>
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<tr>
<td>95e</td>
<td>This is no unimportant problem that you raise, Cebes, for it requires a thorough investigation of the cause [ἄιτίαν] of generation and destruction.</td>
<td>Fem.</td>
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<tr>
<td>96a</td>
<td>…I thought it splendid to know the causes [ἄιτίας] of everything, why it comes to be, why it perishes and why it exists.</td>
<td>Fem.</td>
</tr>
<tr>
<td>96e</td>
<td>And what do you think now about those things? - That I am far, by Zeus, from believing that I know the cause [ἄιτίαν] of any of those things.</td>
<td>Fem.</td>
</tr>
<tr>
<td>97a</td>
<td>…when they come near to one another, this is the cause [ἄιτία] of their becoming two….</td>
<td>Fem.</td>
</tr>
<tr>
<td>97a</td>
<td>Nor can I any longer be persuaded that when one thing is divided, this division is the cause [ἄιτία] of its becoming two, for just now the cause [ἄιτία] of becoming two was the opposite.</td>
<td>Fem. / Fem.</td>
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Grube translates each occurrence of αἰτία as cause, but Vlastos argues that this translation is misleading, since αἰτία’s “range of significance is far wider than that of the word ‘cause’ as used nowadays both in ordinary speech and in philosophical discussions.” Therefore Vlastos holds that in 95e-97b, Socrates is not beginning a search for causes at all. In this section, I will not yet make an affirmative case that Socrates is searching for causes, but I will examine some of the weaknesses in Vlastos’ case that he is not. This will clear the way for me to present my own arguments later in the chapter.

In order to show that Socrates is not really searching for causes, Vlastos draws attention to how much broader the term αἰτία is than cause. He examines a few of Aristotle’s examples of αἰτίαι from the Posterior Analytics and the Physics. One such example is that the Athenian raid on Sardis is an αἰτία of the Persian raid on Attica. Vlastos says that the Athenian raid is not only the αἰτία, but also the cause of the Persian raid, because it is a “fair example of a temporal antecedent which is the (supposed) sufficient condition of the occurrence of the event….” So in this case, the cause and the αἰτία are one and the same.

But further examples show that not all αἰτίαι are causes. Aristotle tells us that health can be an αἰτία of walking. But Vlastos says that health could not be a cause of walking, since Aristotle “makes it abundantly clear that he does not ascribe causal agency to the ‘final’ aitia….” Vlastos provides two other examples of Aristotelian αἰτίαι that are not causes. One is that the αἰτία of a statue being heavy is bronze. According to Vlastos, bronze is not a cause. It

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5 Ibid., 78.
6 Ibid., 79.
7 Ibid.
helps to explain the heaviness of the statue, but does not cause it to be heavy. The other example is that the αἰτία of the angle at the semicircle being a right angle is its being equal to half of two right angles. This too is an αἰτία, but not a cause. Its role is explanatory, not causal. These Aristotelian examples of αἰτίαι show that αἰτίαι are sometimes causes, but sometimes not. So αἰτία has a broader sense than cause, and in Vlastos’ view, it is much broader.

Since the meaning of αἰτία is so much broader than the meaning of cause, Vlastos argues that it is misleading to translate the former with the latter. He even goes so far as to suggest that Liddell and Scott are wrong to list cause as a possible translation for αἰτία in their Greek-English Lexicon.  

Liddell and Scott, *Greek-English Lexicon*, lists the following senses for αἰτία: I. responsibility; II. cause; II. [sic] occasion, motive; IV. head, category under which a thing comes; V. case in dispute. In this paper I shall be concerned exclusively with sense II, which the dictionary renders by “cause” – mistakenly so, in my opinion….

Since cause is an inappropriate translation, he offers an alternative, saying that “Aristotle’s so-called four ‘causes’ are his four ‘becauses.’” But this seems like an odd translation to me, if for no other reason than that because is a conjunction, whereas αἰτία is a noun. The substantive use

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8 Though it is not ultimately essential to his case, this claim seems far too extreme to me. Even though αἰτία has a wider signification than cause, this fact alone is not enough reason to reject cause as a translation. It is quite common that a word in one language has a richer sense than its best approximation in another language. So translators would find themselves completely paralyzed if they were limited to translating each word with a precise equivalent. For example, when translating the English verb to know into German, one immediately finds that the English verb carries a wider range of meanings than any one German verb will translate. To know in the sense of grasping a fact translates into German as wissen, but to know in the sense of being acquainted with someone translates as kennen. Once one sees how distinct these two German verbs are from each other, one realizes that the English verb to know is a very rich word, encompassing many distinguishable senses. But we would not say that because to know has a wider signification than wissen, we should never use wissen to translate it. Rather, it is the task of the translator to determine the sense in which each word is being used in the original language and then to approximate it as closely as possible in the second language. So we should not think that simply because αἰτία has a wider signification than cause, it is inappropriate to translate one with the other.


10 Ibid., 79.
of *because* immediately sounds strange, which is perhaps the reason why Vlastos makes so little use of it in the remainder of his article, instead most often leaving *aitía* untranslated. It should also be noted that *because* originally arose from the phrase *by cause*, making it a direct derivative of *cause*. This means that, at least originally, *cause* determined the range of meaning of *because*. So I am skeptical that this alternative translation is an improvement over *cause*.

Nevertheless, I am willing to grant Vlastos’ conclusion that “the mere fact that Plato speaks of the Forms as *aitiai* in our passage is not itself the slightest evidence – not even *prima facie* evidence – that he wants them to be causes.”\(^{11}\) To determine whether or not Socrates is launching a search for causes, we must look more closely at how *aitía* is used in the remainder of the *Phaedo*, which we will do in the following sections.

For his part, Vlastos presents no direct arguments that *aitía* are not causes in the *Phaedo*. Instead, he primarily concerns himself with offering a compelling non-causal interpretation of the text. (His interpretation of the safe answer will be explained later in this chapter.) The closest he comes to providing an affirmative argument that the *Phaedo’s aitía* (forms) are not causes is the following:

Plato’s Squareness has no more causal efficacy than has the nominalist’s: it has no power to spawn earthly squares; if it did, so would the Form, Myriagon, and each of the countless others that have had no mundane progeny and never will.\(^{12}\)

But this is a very weak argument for the following reason. The Myriagon form is not without progeny. Even if there are no physical myriagon s in the universe, individual myriagons do exist as mental objects. Descartes famously tells us that although he is unable to imagine a proper

\(^{11}\) Ibid., 81.

\(^{12}\) Ibid., 92.
myriagon, he is nonetheless able to think of one. And many mathematical questions would require us to consider more than one instance of Myriagon simultaneously. So if mental progeny count, then the Myriagon has progeny, and in principle every other form could.

The second closest Vlastos comes to arguing that the Phaedo’s αἰτίαι (the forms) are not causes is when he argues that they are not like Aristotle’s “efficient causes:”

For since all Forms are absolutely free of spatio-temporal limitations, then if one of them were supposed to be acting on a particular spatio-temporal object, a, with a determinate property, P, we would have to suppose (i) that it is also acting on all other objects in the universe, including those which do not have the property P, and further (ii) that all other Forms, including Forms corresponding to properties contrary to P, are simultaneously acting on a. In other words, because the forms are not in any particular place and time, it seems that they must act equally on all objects at all times. But if the form of P acts equally on all objects, then why are some objects P, while others are not P? We should expect all objects to be equally P. And if all forms, including those contrary to P, are acting on a, then why is a P, rather than one of its contraries? We should expect a to be affected equally by P and its contraries, and so it is unclear why a is determinately P. Vlastos continues:

The only way to avoid the absurd consequences of the supposition would be to credit the Forms with the power to act selectively on different objects in the universe, directing their causal influence to some of them, withholding it from others. And how could Plato have so particularized his Forms as causal agents in the world of space and time without fouling up the most fundamental of his metaphysical principles?

And here, I think, Vlastos reveals the primary reason why he denies that the forms are causes. It is not due to any direct evidence in the text, but rather due to a desire to be charitable to Plato.

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13 Meditations VI.

14 Ibid., 89.

15 Ibid., 90.

16 After discussing Vlastos’ interpretation of the Phaedo’s aetiology, Wiggins also comes to the conclusion that modern interpretations of Plato’s aetiology are driven by misplaced charity. Wiggins, esp. p. 4.
He believes that it would be absurd for Plato to make the forms causes, since this appears to violate their status as eternal and unlocated. Vlastos’ interpretation is meant to exonerate Plato of this absurdity by showing that Plato isn’t really saying what he appears to say:

   This interpretation… frees Plato from so much embarrassment and is so consonant with everything else we know of his metaphysical views that it would have a strong claim on us even without further confirmation.\textsuperscript{17}

Clearly, Vlastos’ driving concern is to give us a more charitable reading of Plato, one that has less appearance of absurdity or incoherence of principles. He takes the absurdity of calling forms causes to be strong evidence that Plato didn’t do it. This means that Vlastos’ case would crumble if it could simply be shown that there is no absurdity in calling forms causes. I will take up that project in the final chapter of this dissertation. But for now, I simply wish to draw attention to the fact that Vlastos provides no direct textual evidence for his contention that αἰτίαι are not causes.

   Perhaps this is why so many translations of and commentaries on the \textit{Phaedo} have continued to translate αἰτία as \textit{cause}. For example, αἰτία is translated as \textit{cause} in G. M. A. Grube’s 1977 translation and in the 1998 translation by Eva Brann, Peter Kalkavag and Eric Salem. \textit{Cause} is also used while discussing our passage in Ronna Burger’s 1984 commentary\textsuperscript{18} and David White’s 1989 commentary.\textsuperscript{19} David Bostock’s 1986 commentary says this:

   The Greek word αἰτία here translated as ‘reason’ is not especially precise: one could equally say that Socrates is concerned with the \textit{cause} of coming to be and ceasing to be, or with what is \textit{responsible} for it, or with the \textit{explanation} of it. These English expressions too shade into one another, and I shall use them indifferently when commenting on what Socrates says.\textsuperscript{20}

\textsuperscript{17} Vlastos, \textit{“Reasons and Causes,”} 93.

\textsuperscript{18} Esp. chapter 10.

\textsuperscript{19} Esp. chapters 8-10.

\textsuperscript{20} Bostock, \textit{Plato’s “Phaedo,”} 135.
In fact, it seems that only a minority of modern translators and commentary writers have been completely persuaded by Vlastos. Notably, D. Gallop’s 1993 translation generally translates αἰτία as reason, and C. J. Rowe’s 1993 commentary on the Greek text of the Phaedo calls the traditional cause translation of αἰτία “misleading.” But for the majority of modern translators and commentary writers, cause remains a legitimate rendering of αἰτία.

It is also worth mentioning that several published articles have directly confronted Vlastos’ claims and rejected his thesis, instead arguing that αἰτίαι are truly causes. Even though Evan Burge is in substantial agreement with Vlastos, and calls cause a misleading translation, he argues that when αἰτία is applied to an entity rather than to a proposition, alternative translations such as reason or explanation fail and the meaning is closer to cause. Leo Sweeney explicitly rejects Vlastos’ reading and says, “hē aitia and to aition in technical contexts I take to mean ‘cause’ in the sense of ‘that which produces something in some sort of direct way.’” Christopher Byrne and Ian Mueller have written entire articles in response to Vlastos’ claims. While Byrne does not accept that the forms themselves are causes, he rejects Vlastos’ notion that the aetiology of the passage is not concerned with causes at all. He says, “When one turns to the text of the Phaedo, there are excellent reasons for thinking that Plato here was discussing efficient causality and the relation between Forms and efficient causes.” And Mueller says that “…although it is not decisive, Plato’s vocabulary in the Republic and Phaedo is strong prima


24 Byrne, 5.
facie evidence that Forms do have causal efficacy for him.”

David Sedley’s article, “Platonic Causes,” which works from the assumption that the *Phaedo* passage is about causes, dismisses Vlastos’ claims in a footnote. Citing Vlastos’ article, he writes, “The contrary assumption is a major weakness in an influential article with which I can find no common ground at all…..” And more recently (in 2004), Sean Kelsey has argued against Vlastos in an article called “Causation in the *Phaedo,*” on the opening page of which he writes,

> Following Aristotle, I understand this ‘Form-hypothesis’ to be some kind of thesis about causality. That is, I take Socrates to be talking about how things get to be the way they are, not about what it is for them to be that way: his hypothesis makes a claim not about the constitution of things, but about their causal history.

From these examples, it is clear that even though Vlastos’ article has been highly influential, it has by no means gained a monopoly on interpretation of the *Phaedo.* It has influenced only a minority of the recent translations and commentaries to be cautious about using the word *cause.* And it has met with a significant amount of explicit criticism and outright rejection. So for the last 40 years, it has remained acceptable to claim that in the *Phaedo,* Socrates is searching for causes.

2. **The Meanings of Αἰτίος, Αἰτία and Αἰτιον in the Passage on Anaxagoras**

In the *Phaedo,* Socrates typically uses *aitia* as a feminine noun. However, in the discussion of Anaxagoras (97b-99c), in which Socrates uses forms of *aitia* 19 times, the gender is inconsistent.

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25 Mueller, 76.

I heard someone reading, as he said, from a book of Anaxagoras, and saying that it is Mind that directs and is the cause [αἴτιος] of everything. I was delighted with this cause [αἴτια] and it seemed to me good, in a way, that Mind should be the cause [αἴτιον] of all.

If then one wished to know the cause [αἴτιαν] of each thing…

As I reflected on this subject I was glad to think that I had found in Anaxagoras a teacher about the cause [αἴτιας] of things after my own heart, and that he would tell me, first, whether the earth is flat or round, and then would explain why [τὴν αἴτιαν] it is so of necessity…

…I should be prepared never to desire any other kind of cause [αἴτιας].

I never thought that Anaxagoras, who said that those things were directed by Mind, would bring in any other cause [αἴτιαν] for them…

Once he had given the best for each as the cause [αἴτιαν] for each…

…but mentioned as causes [αἴτιας] air and ether and water and many other strange things.

That seemed to me much like saying that Socrates' actions are all due to his mind, and then trying to tell the causes [αἴτιας] of everything I do…

…and that is the cause [αἴτιαν] of my sitting here with my limbs bent. Again, he would mention other such causes [αἴτιας] for my talking to you…

…but he would neglect to mention the true causes [αἴτιας]…

To call those things causes [αἴτου] is too absurd.

Imagine not being able to distinguish the real cause [αἴτου] from that without which the cause [αἴτου] would not be able to act as a cause [αἴτου]. It is what the majority appear to do, like people groping in the dark; they call it a cause [αἴτου], thus giving it a name that does not belong to it.

I would gladly become the disciple of any man who taught the workings of that kind of cause [αἴτιας].

This has led some to believe that the differently gendered words might not carry identical meanings. And that belief has led to additional arguments that the forms are never identified as causes in the Phaedo. In this section, I will explain and respond to those arguments, again clearing the way for my arguments later in the chapter that the forms are active causes.

The nouns αἴτιος, αἴτια and αἴτιον derive their meaning from the adjective αἴτιος, which means culpable or responsible. In law, this adjective is used substantively to refer to the one to

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Grube's translation has the word cause again later in 99a. “…but surely to say that they are the cause of what I do… is to speak very lazily and carelessly.” However, the Greek text does not contain the word αἴτια, and Grube only inserts cause to make the translation fluid.
whom culpability for an illegal act is assigned, i.e. the accused or the culprit. So the adjective became a masculine noun, *aítiος*. But when the adjective was used substantively as a feminine noun, *aítiα*, it referred to the particular responsibility which the culprit bore, i.e. to the accusation made against him. So whereas the *aítiος* was a *person*, the *aítiα* was what the *aítiος* had done, often expressed as a *proposition*.

Eventually, these words came to be used outside the context of assigning criminal blame, so that they could be employed to identify that which bore responsibility for any sort of thing.

Michael Frede explains very nicely that this began as an analogical use of the words:

> When the use of ‘aition’ was extended such that we could ask of anything ‘What is its aition?’ this extension of the use of ‘aition’ must have taken place on the assumption that for everything to be explained there is something which plays with reference to it a role analogous to that which the person responsible plays with reference to what has gone wrong….

But when the words came to have this broader usage, was the distinction between *aítiα* and *aítiος* preserved? Does the gender of the noun have any significance when it is used outside of a legal/moral context? Is an *aítiα* different from an *aítiον* or an *aítiος*?

Until about forty-five years ago, the nouns were treated as synonyms. In 1971, Evan Burge wrote, “Aítiος is the Greek for ‘responsible’ and its neuter, τό aítiον ‘the thing responsible’, is often used as a synonym for αítiα….“ But only a few years later, James Dye suggested that Plato uses these words differently. The neuter and feminine forms, he claims, are typically used as technical terms, whereas the masculine is typically used for casual mentions.

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28 Liddell and Scott, 44.

29 Ibid.

30 Michael Frede, 226.

31 Burge, 2.

of blameworthiness. Because of this, Plato’s aetiological system develops around the feminine and neuter forms of the word. By itself, Dye’s distinction of the casual masculine from the technical feminine and neuter has little implication for how we interpret the *Phaedo*’s aetiology. However, others have developed the idea of gender significance in these words in directions that do have very important implications for whether Plato is discussing causes in the *Phaedo*.

The most influential article on this topic was written by Michael Frede, who suggests that the key distinction in the Anaxagorean passage in the *Phaedo* is between the masculine/neuter forms (*aītioς/aītioν*), which remain substantive adjectives, and the feminine form (*aītía*), which has become a noun in its own right. He describes the distinction as follows:

> In spite of its ample use both of the adjective and the noun, the passage reserves the adjective for entities like Anaxagoras’ Nous and Socrates’ bones and sinews, whereas an *aītia* throughout seems to be a propositional item, the reason or explanation why something is the way it is.\(^{33}\)

The key difference here is between an *entity (aītioς/aītioν)* and a *proposition (aītía)*. This distinction is attractive, since it nicely resembles the legal distinction between the culprit, who is an entity, and the charge, which is often a proposition.

However, this distinction also threatens my claim that the *Phaedo* is concerned with causes. Various forms of the word are used 39 times in the *Phaedo*, with only nine instances being masculine or neuter. In the overwhelming majority of cases, the word is feminine. If we restrict the count to the passage on aetiology (95e-105c), then there are 35 instances, with 28 of them being feminine. The only masculine and neuter instances are the 7 from the passage on Anaxagoras, which I have listed at the beginning of this section. So in 95e-105c, 80% of the instances are feminine. This means that, according to Frede’s reckoning, 80% of the passage is

\(^{33}\) Michael Frede, 223.
about “propositional items” rather than entities. And since, according to Frede, a propositional item is only a “reason or explanation,” but not a cause, the passage does not appear to have causes as its principal concern.

Frede’s distinction has been criticized by Ian Mueller, who is not convinced that there is any difference in meaning at all. He points out that Plato’s forms are not propositional items, but entities, and yet it is almost universally accepted that the Phaedo identifies them as the true αίτια. This is an obvious example of αίτια being applied to entities, and thus a refutation of Frede. It is surprising that such obvious evidence against Frede’s distinction comes out of the very passage from which Frede derived the distinction in the first place.

Frede has received more detailed scrutiny from Grace Ledbetter, who provides a number of cases from beyond the Phaedo in which Plato’s usage is utterly incompatible with Frede’s distinction. She identifies the following passages as cases in which an entity is identified as an αίτια.

- **Philebus** 30c: The αίτια that orders the universe is called wisdom or mind.
- **Republic** 517b-c: The form of the Good is identified as the αίτια of all right and beautiful things.
- **Timaeus** 18e: The citizens will believe that chance is the αίτια of the marriage lottery.
- **Laws** 896b: Soul is called the αίτια of all change and motion.

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34 Mueller, 83.

35 Grace Ledbetter, “Reasons and Causes in Plato: The Distinction Between αίτια and αἴτιον,” *Ancient Philosophy* 19 (1999), 256-8. She acknowledges that some of her examples may be adjectival uses of the word rather than nouns. For this reason, I have omitted from her list Gorgias 457a, in which the art of teachers is described as αίτια. I believe the word is clearly an adjective in that case.
On the other hand, she finds the following examples in which αἰτία is used in reference to a proposition.

- **Phaedo 110e**: The gems on the earth’s surface are more beautiful than those in the hollows, and the αἰτία is that the ones on the surface are purer.

- **Apology 40b**: The αἰτία of Socrates’ δαιμόνιον failing to oppose anything in his defense speech is that what has happened to him is good and death is not an evil.

- **Republic 578d**: Masters have nothing to fear from their slaves and the αἰτία of this is that the whole state is ready to defend each of the masters.

Together, these examples demonstrate that Plato does not consistently use αἰτία for propositions, or αἰτία for entities. Either term may be used for either sort of thing. And the fact that one of these examples comes from the Phaedo itself shows that the distinction does not even hold consistently within that dialogue.

Ledbette goes on to suggest an alternative distinction. First, she examines how Plato uses these words throughout his dialogues, and then at how his usage is refined in the Anaxagorean passage in the Phaedo. She proposes that αἰτία is a very broad term, and that αἰτία is a narrower term, a particular species of αἰτία. An αἰτία can be a cause, reason, or explanation. But the narrower αἰτία only ever means cause. An αἰτία is never a reason or an explanation. So in general, αἰτία and αἰτία are related as a genus and species.

Next, Ledbetter turns to how this distinction works in the Phaedo. Here, she says, Plato wants to distinguish reasons in general from causes in particular. He already has the word αἰτία to use for cause. But to get a word that means reason, as opposed to cause, he must use his genus word, αἰτία, in a more restrictive way. So in the Anaxagorean passage of the Phaedo
alone, *aitia* always means *reason*, as opposed to *aíthov*, which means *cause*. “…Socrates uses *aitia* specifically to mean ‘reason’, not ‘cause’ or the generic ‘explanation’.”

Ledbetter believes that in the Anaxagorean passage, Plato’s point is that the true cause (*aíthov*) of anything is the reason (*aitia*) behind it. Anaxagoras had claimed that Mind is the cause (*aíthov*) of all things. So Socrates expected that for each thing, there would be a reason (*aitia*) and that this reason would be its cause (*aíthov*). But Anaxagoras failed to provide any reasons to account for things, and so he also failed to identify any true causes. Instead, Anaxagoras only pointed to material things, which are not causes in the truest sense. Ledbetter takes Plato’s reasoning to be that since no material thing is a reason, no material thing can be a true cause. This is why he ridicules the idea that his bones and sinews could be the cause of his being in prison, saying,

> Imagine not being able to distinguish the real *aíthov* from that without which the *aíthov* would not be able to act as an *aíthov*. It is what the majority appear to do, like people groping in the dark; they call it an *aíthov* thus giving it a name that does not belong to it. (99b)

Here, Ledbetter takes Plato to be saying that material things are not causes at all, but rather that they contribute to the true cause (which is a reason) being able to act. The passage, then, is trying to convey a strong endorsement of the idea that only reasons can be causes.

Ledbetter’s interpretation lends some support to my thesis since, if she is right, the *Phaedo*’s aetiology is concerned with causes. And she provides a strong argument that, at the very least, *aíthov* at 99b must mean *cause*, rather than *reason* or *explanation*. She observes that the bones and sinews are clearly said to be that without which the *aíthov* cannot be the *aíthov*. If *aíthov* meant *reason* or *explanation* here, then Socrates would be saying that his reason for

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36 Ibid., 261.

37 Ibid.
staying in prison could not be a reason without his bones and sinews. And this seems too absurd to accept. So at least in this one place, αἴτιον clearly means cause.

However, if Ledbetter is correct in saying that αἴτια means reason, then it still seems that from the beginning, Socrates is principally looking for reasons rather than causes. And therefore when this search leads him to the forms, he identifies the forms as reasons, not as causes. But I am skeptical about Ledbetter’s interpretation, since her evidence for the distinction between αἴτια and αἴτιον is problematic. One of her primary reasons for believing that the two forms of the word are distinct is that since they “appear together in close proximity and in philosophically loaded contexts…. it seems unlikely that Plato switches between the terms merely for the sake of stylistic variation.”38 However, it seems to me that the close proximity of a number of uses is one of the primary reasons why someone would employ stylistic variation. When a word only appears once every few pages, one does not concern oneself with varying the style. However, when the same word is to be used over and over, one often varies the style to make the writing less repetitive. I have found two cases in which Plato uses two forms of the word in close proximity with no apparent change in meaning at all. First, at Timaeus 64a, he writes,

The most important point that remains concerning the properties that have a common effect upon the body as a whole, pertains to the causes [αἴτιον] of pleasures and pains in the cases we have described as well as all cases in which sensations are registered throughout the bodily parts, sensations which are also simultaneously accompanied by pains and pleasures in those parts. With every property, whether perceived or not, let us take up the question of the causes [αἴτια] of pleasure and pain in the following way….39 (The underlining is my own.)

38 Ibid., 255.

39 Zeyl translates the singular αἴτιον with the plural causes, probably because it seemed unlikely to him that pleasure and pain would share a single cause, and also to make the phrasing match what appears in the next sentence, where Plato again refers to the causes of pleasure and pain, but this time uses the plural αἴτια. 
It seems clear that the second underlined phrase is meant to recall the first, and there is no implied shift in meaning between the two occurrences. Rather, the shift here is purely a matter of stylistic variation. The second case is at *Philebus 26c*:

> And is it not the case that there is no difference between the nature of what makes and the cause [αἰτίας], except in name, so that the maker and the cause [αἴτιον] would rightly be called one?

In this case, it is even clearer that the words are being used synonymously. If they were meant to have distinct meanings, then the conclusion of the sentence would not follow. The *Timaeus* and *Philebus* are almost universally held to have been written after the *Phaedo*. So if Plato were truly developing a technical distinction in his terms in the *Phaedo*, we would expect that distinction to carry over into subsequent dialogues. But it does not. Therefore, it seems unlikely that he is really trying to make a technical distinction in the *Phaedo*.

Secondly, if Ledbetter were right, then the aetiological passage in the *Phaedo* would be concerned with a search for reasons, rather than for causes. Socrates would begin the passage by saying that they need to discuss the reason for generation and destruction. He would then examine the reasons suggested by the materialists and find them to be lacking. Next he would discuss Anaxagoras’ approach to *causes*, a discussion which would have no relevance to how one finds *reasons*. In discussing Anaxagoras, Socrates would argue that all causes must be reasons (a point irrelevant to the search for reasons themselves), and then go on to discuss his own approach to finding reasons. So, if Ledbetter were correct, then the entire discussion of Anaxagoras would be an irrelevant digression. It would say something interesting about causes but contribute nothing to Socrates’ goal of discovering reasons.

Thirdly, Ledbetter has proposed that whereas in the rest of the Platonic corpus, αἴτιον is a species of αἰτία, in the *Phaedo* passage alone, αἰτία takes a narrower meaning in order to contrast
with ἀἴτιον. But since this passage contains only seven instances of the masculine/neuter forms, and these appear in only five sentences, there is very little evidence from which to determine the nature of any distinction. So, in addition to the other problems with Ledbetter’s conclusion, it is based on a very small amount of evidence.

And lastly, if gender were truly important here, we would also have to account for the fact that Plato uses all three genders in this passage, not only two. Of the seven masculine/neuter instances, five are neuter, one is masculine, and one is ambiguous (see the chart at the beginning of this section). Both Frede and Ledbetter lump all seven of these together. But surely, if they embrace the idea that variation of gender conveys variation of meaning, then they must explain how the one unambiguously masculine usage differs from the neuter. In failing to do so, they appear to assume that variation between the masculine and neuter forms means nothing. But if they are willing to grant that the masculine and neuter forms are used interchangeably, why do they insist on a distinction between the feminine and the neuter? And their insistence is especially puzzling when there are so few instances of the variation to provide any kind of certainty about what the supposed distinction might be.

Frede and Ledbetter both point out that other ancient authors distinguished these terms. However, they do not believe that any of these other authors made quite the same distinction as Plato. So Frede and Ledbetter are asserting that Plato distinguished these terms in a way that was uniquely his own (and according to Ledbetter, unique to this passage), that Plato employed this distinction in such a way that understanding it is crucial for understanding the meaning of the passage, and yet he made no effort to be explicit about how the distinction works. If all of
this were true, it would be surprising that Plato expected anyone to understand what he had written.

Considering all of this, I propose that there is no distinction in meaning among the masculine, feminine and neuter forms of \( \alpha \iota \iota \alpha \). When two words are derived from the same root, even though they differ superficially, it is not at all unusual for their meanings to be identical. For example, the adjectives \textit{optimal} and \textit{optimum} are synonyms, as are the verbs \textit{chasten} and \textit{chastise}, the adjectives \textit{crazy} and \textit{crazed}, the nouns \textit{mastery} and \textit{masterhood}, etc.

Frede suggests that the legal distinction between \( \alpha \iota \iota \alpha \) and \( \alpha \iota \iota \iota \) carries over into other contexts. However, it is not uncommon that two words derived from the same root are distinguished in a specialized field, but not in their pedestrian use. One example from the modern legal field is the distinction between an arbiter and an arbitrator. Outside of the legal context, these words are used interchangeably to mean “one who decides.” But in law, an arbiter is anyone with authority to render a judgment, whereas an arbitrator is someone in charge of an arbitration (a type of dispute resolution that avoids a formal trial). Likewise, common usage does not differentiate \textit{obligate} from \textit{oblige}. But in law, to be obliged means to be coerced, whereas to be obligated means to have a legal or moral imperative.\footnote{I am grateful to Michael Baur for explaining this distinction to me in roughly the same terms in which I now present it.} For example, a gunman could oblige me to open a safe, but could not obligate me. Since modern legal distinctions between related words can sometimes disappear in common usage, why shouldn’t the same be true of ancient legal distinctions? The distinction in law between \( \alpha \iota \iota \alpha \) and \( \alpha \iota \iota \iota \) need not be carried over into Plato’s usage at all.
So again I propose that these words are used interchangeably. And I reiterate my claim that their meaning is best approximated in English by *cause*, rather than *reason* or *explanation*. The word *reason*, since it shares the same root as the word *rational*, is closely linked to the notion of thought. To give a reason for something is to justify it in thought, i.e. to provide an intellectually satisfying account of why it is so. But nothing we know about the etymology of *aitía* suggests that this word has any association with thought at all. Therefore, thinking of an *aitía* as a reason adds a significant shade of meaning which is not warranted by the Greek.

Furthermore, from the beginning of the aetiological passage, Socrates assumes that there are *aitía* in nature for us to discover. Could he mean by this that there are reasons in nature? If he assumes from the beginning that nature is full of reasons, then it is difficult to see why he was so impressed by the Anaxagorean idea that Mind orders all things. If Socrates already believed that nature is full of reasons, then all Anaxagoras added was a Mind in which those reasons originate. But this flies in the face of the broad consensus that Socrates was impressed with Anaxagoras precisely because he suggested that everything is ordered by a reason (i.e. according to what is best). So if we want to believe with the majority that the Anaxagoras passage introduces the idea of a world ordered by reasons, then we cannot hold that Socrates was looking for reasons all along. That is, we cannot hold that *aitía* means *reason*.

There are problems with thinking of *aitía* as explanations as well. Typically, an explanation is not merely an entity. Suppose I am asked to explain why I have missed a meeting and my answer is simply, “my cat.” By itself, this is not an explanation at all. But if I were to say that I missed the meeting because my cat was sick and I needed to take it to the veterinarian, that account would be recognizable as an explanation. Generally speaking, an explanation
requires an account, not simply the naming of a responsible entity. In fact, far from being an explanation, the responsible entity, such as my cat, is usually the cause.

Some of Socrates’ proposals in his search for αἰτία are quite similar to this. At 96d-e, he says that he once thought that one man was taller than another because of a head. But there is no account given of how a head would bring about this effect. Instead, we are only provided with an identification of what was responsible for one man being taller than the other. We are not given any explanation of the responsibility. Similarly, at 97c, Socrates says that he was delighted with Anaxagoras’ identification of Mind as the αἰτιος of all things. But no further account is given, other than to say that Mind would direct all things toward what is best. So while Anaxagoras identifies a cause (Mind), he provides no explanation of how it serves as a cause. Mind, by itself, is not an explanation. And most significantly, when Socrates finally suggests that forms are the true αἰτίαι, he is open about the fact that he doesn’t understand exactly how they work. At 100d, he says, “…I will not insist on the precise nature of the relationship, but that all beautiful things are beautiful by the Beautiful.” Here, it is clear that Socrates isn’t sure how to give an account of the relation between the Beautiful and beautiful things. He cannot offer an explanation of how one is responsible for the other. Instead, he simply identifies the Beautiful as that which is responsible. Put simply, he cannot provide an explanation, even though he can identify the cause. So the meaning of αἰτία discussed in the Phaedo is much closer to cause than to explanation.

However, Ledbetter identifies one instance from the Phaedo in which she thinks that αἰτία cannot mean cause. Commenting on 98c-99a, she writes,
If *aitia* is read ‘cause’ (or some broader term that includes cause), then Socrates must be claiming that it is absurd to call bones and sinews causes. But from a common-sense point of view, why should it be absurd to call them causes?41

The implication of her rhetorical question is that it is common sense to think of bones and sinews as causes, so Socrates cannot be denying that they are causes here. He must be denying something else, namely that they are reasons.

However, Socrates never denies that bones and sinews are *aitia* in an absolute sense. Rather, he ridiculesthe idea that they are the *aitia of his sitting in prison*. There is a perfectly sensible way of reading *aitia as cause* here. His bones and sinews cannot be the cause of his sitting *in prison* since, as he points out, they could just as easily have carried him to Megara. By themselves, the bones and sinews are not determinative of his sitting *in prison*. Therefore, even according to common sense, they cannot be the cause of it. The true cause will be that which is responsible for his sitting in prison rather than in Megara. The true cause will be his reason, i.e. that he thought it best for him to be sitting in prison. If the question had been “How is Socrates able to sit?” then the bones and sinews would surely be causes. But when the question is about why he is sitting *in prison* rather than elsewhere, it is not common sense to see the bones and sinews as causes of this at all. So Ledbetter’s objection to *aitia* meaning *cause* doesn’t work.

Therefore, I maintain that in the *Phaedo*, *aitia* means something akin to *cause*, and that it is much closer in meaning to *cause* than to *reason* or to *explanation*. Furthermore, there is nothing in the discussion of the proper translation of *aitia* words that militates against the view that forms are active causes rather than reasons.

41 Ledbetter, 261.
3. Forms as Αἰτίαι in the Safe Answer

In the course of presenting his safe answer, Socrates uses the word αἰτία 9 times, with every usage being feminine.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Text</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>99d</td>
<td>…do you wish me to give you an explanation of how, as second best, I busied myself with the search for the cause [aiţiaç], Cebes?</td>
<td>Fem.</td>
</tr>
<tr>
<td>100a</td>
<td>However, I started in this manner: taking as my hypothesis in each case the theory that seemed to me the most compelling, I would consider as true, about cause [aiţiaç] and everything else, whatever agreed with this, and as untrue whatever did not agree.</td>
<td>Fem.</td>
</tr>
<tr>
<td>100b</td>
<td>I am going to try to show you the kind of cause [aiţiaç] with which I have concerned myself. I turn back to those oft-mentioned things and proceed from them. I assume the existence of a Beautiful, itself by itself, of a Good and a Great and all the rest. If you grant me these and agree that they exist, I hope to show you the cause [aiţiaν] as a result, and to find the soul to be immortal.</td>
<td>Fem. / Fem.</td>
</tr>
<tr>
<td>100c</td>
<td>Do you agree to this sort of cause [aiţiaν]? – I do. I no longer understand or recognize those other sophisticated causes [aiţiaç] …</td>
<td>Fem. / Fem.</td>
</tr>
<tr>
<td>101b⁴²</td>
<td>Then you would be afraid to say that ten is more than eight by two, and that this is the cause [aiţiaν] of the excess…. Then would you not avoid saying that when one is added to one it is the addition and when it is divided it is the division that is the cause [aiţiaν] of two?</td>
<td>Fem. / Fem.</td>
</tr>
<tr>
<td>101c</td>
<td>…and in these cases you do not know of any other cause [aiţiaν] of becoming two except by sharing in Twoness….</td>
<td>Fem.</td>
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</table>

Until now, I have taken it for granted that Socrates identifies the forms as αἰτίαι in his safe answer. But in this section, I will examine an objection by Shigeru Yonezawa, who argues that this passage does not identify the forms as αἰτίαι at all.⁴³ I will argue against Yonezawa’s interpretation, and then begin to consider the question of whether this sort of αἰτία can rightly be called a cause, the question central to this dissertation. Special attention will be given to Vlastos’ non-causal interpretation of the safe answer.

Yonezawa argues that Plato’s true αἰτία are not the forms, but participation and the immanent characters which result from it. He points out that when Socrates presents his own

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⁴² Grube’s translation has the word cause prior to this, at 101a. “…everything that is bigger is made bigger by nothing else than by Bigness, and that is the cause of its being bigger….” However, the Greek text does not contain the word αἰτία, and Grube only inserts cause to make the translation fluid.
aetiology in the safe answer, he makes his final uses of the word \(\text{αἰτία}\). (The word is not used at all in the discussion of the more refined answer.) But Yonezawa claims that none of the final uses applies the term to forms. In fact, only two involve Socrates affirmatively identifying anything at all as a true \(\text{αἰτία}\). They are at 100c and 101c:

\[
\ldots \text{I think that, if there is anything beautiful besides the Beautiful itself, it is beautiful for no other reason than that it shares in } [\text{μετάσχεσι}] \text{ that Beautiful, and I say so with everything. Do you agree to this sort of cause } [\text{αἰτίᾳ}]? \quad (100c)^{44}
\]

And you would loudly exclaim that you do not know how else each thing can come to be except by sharing in \([\text{μετάσχεσι}]\) the particular reality in which it shares \([\text{μετάσχεσι}]\), and in these cases you do not know of any other cause \([\text{αἰτία}]\) of becoming two except by sharing in \([\text{μετάσχεσι}]\)

Twoness, and that the things that are to be two must share in \([\text{μετάσχεσι}]\) this, as that which is to be one must share in Oneness…. \(101c\)

The grammar in both of these cases suggests that it is the “sharing in” \([\text{μετάσχεσι}]\), rather than the form itself which is identified as the \(\text{αἰτία}\).

However, I argue that if Plato intended \(\text{μετάσχεσι}\) to be the true \(\text{αἰτία}\), we would expect him to establish \(\text{μετάσχεσι}\) as a technical term and to use it consistently when identifying \(\text{αἰτία}\). But he does not. At 100d, Socrates says, “...nothing else makes it beautiful other than the presence of \(\text{(παρουσία)}\), or the sharing in \(\text{(κοινωνία)}\), or however you may describe its relationship to that Beautiful we mentioned....” Here the diversity of formulations makes it clear that \(\text{μετάσχεσι}\) has not been established as a technical term. The words here are not even synonyms of \(\text{μετάσχεσι}\), and have significantly different shades of meaning. This shifting of terms suggests that Plato’s emphasis is not on any particular formulation of the relationship between beautiful things and Beauty itself, but rather on the one thing that is consistent across all formulations of the relationship, namely the form of Beauty. This does not outright preclude the

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44 The phrase “for no other reason” here does not involve \(\text{αἰτία}\), but is simply \(\text{οὐδὲ ὅτ’}\). Grube is very consistent about translating every instance of \(\text{αἰτία}\) in this passage as “cause.”
possibility that Plato intends μετάσχεσις to be the true aītìa, but it does suggest that he is more interested in the form than in the particular’s relation to it.

Ian Mueller has dismissed Yonezawa’s thesis that μετάσχεσις, rather than a form, is the aītìa, because he is “not persuaded that this difference is significant.” He doesn’t explain why he isn’t persuaded, but he asks an important question: Does Yonezawa’s distinction between forms and μετάσχεσις truly matter? The forms and μετάσχεσις are not two entirely separate things. Rather, Yonezawa is only distinguishing an entity (the form) from its mode of influence (μετάσχεσις). This is like distinguishing the sun from its gravity and then asking which one keeps the planets in orbit. Is it the candle or its shining that illuminates a room? Is it the pitcher or his throwing that puts a baseball into flight? In these cases, the distinction seems relatively unimportant. Whenever we identify an entity as an aītìa, it is understood that the entity has some mode of influencing its object, and that this mode can alternatively be called the aītìa without changing our understanding of the facts. So identifying μετάσχεσις as the aītìa seems equivalent to identifying forms as aītìai.

Furthermore, even if Socrates never explicitly says that the forms are his aītìai, he has other ways of making it clear that they play an aetiological role. For instance, he uses both a dative construction and διὰ constructions to talk about the role of forms. He says that it is by Beauty [τῷ καλῷ] that things come to be beautiful (100d), by Bigness [διὰ τὸ μέγεθος] that they come to be big (101a) and by Smallness [διὰ τὴν σμικρότητα] that they come to be small (101a).

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45 Mueller, 74.

46 Julia Annas has made a similar point. She says that whenever we identify a substance as an efficient aītìa, this is an elliptical way of referring to “a state or event involving some substance.” Annas, 321.
In these cases, it appears that the form itself, and not merely μετάσχεσις, is playing the aetiological role, even though the word αἰτία is not used.

Yonezawa argues that in these cases, it is not the form, but its immanent character which is called an αἰτία. To support this reading, he looks to 102c. “It is not, surely, the nature of Simmias to be taller than Socrates because he is Simmias but because of the tallness he happens to have?” Here, the text says that it is because of the tallness which Simmias has that he is tall. According to Yonezawa, this does not indicate that it is the form of Tallness that makes Simmias tall, but his own share of tallness, i.e. an immanent character of tallness in himself. So the point of 102c is to introduce the notion of immanent characters. If we allow that the αἰτία of Simmias’ tallness is an immanent character, rather than a form, then we need not think that any of the previously mentioned examples identifies a form as an αἰτία. It is not by the form of Bigness itself that big things are big, but rather big things are big because of an immanent bigness in each of them. And since immanent characters are received by μετάσχεσις, μετάσχεσις remains the truest sort of αἰτία.

But this explanation seems quite problematic, since according to Yonezawa’s own reading, the notion of immanent characters isn’t introduced until 102c, whereas the constructions that assign an aetiological role to Beauty, Bigness and Smallness are earlier (at 100d-e). How can Socrates be talking about immanent beauty, immanent bigness and immanent smallness when he has not yet introduced the idea of immanent characters at all? Again, it seems much more likely that at 100d-e, he is really assigning an aetiological role to the forms themselves.

47 Yonezawa, 40.
Furthermore, Yonezawa claims that Socrates only identifies anything as a true \( \alpha \iota \tau \iota \alpha \) at 100c and 101c. But I believe that he has missed a third instance (101b) where a true \( \alpha \iota \tau \iota \alpha \) is identified:

Then you would be afraid to say that ten is more than eight by two, and that this is the cause \([\alpha \iota \tau \iota \alpha \nu]\) of the excess, and not magnitude and because of magnitude, or that two cubits is bigger than one cubit by half and not by Bigness, for this is the same fear. (101b)

This sentence identifies both the sort of \( \alpha \iota \tau \iota \alpha \) in which Socrates no longer believes, and the sort belonging to his safe answer. Ten being more than eight does not have two as its \( \alpha \iota \tau \iota \alpha \), but Magnitude. And the \( \alpha \iota \tau \iota \alpha \) of two cubits being bigger than one is not the extra cubit, but Bigness. Here, it is very clear that Socrates explicitly identifies two forms (Magnitude and Bigness) as \( \alpha \iota \tau \iota \alpha \). So, we can say with a great deal of certainty that in the safe answer, Socrates’ true \( \alpha \iota \tau \iota \alpha \) are the forms. The only real question is what sort of \( \alpha \iota \tau \iota \alpha \) they are. Can we properly call them “active causes?” Can we say that they do anything, and thereby produce an effect in something else?

Vlastos acknowledges that the forms are \( \alpha \iota \tau \iota \alpha \) in the safe answer, but denies that they are causes. So what sort of \( \alpha \iota \tau \iota \alpha \) does he believe them to be? According to him, this sort of \( \alpha \iota \tau \iota \alpha \) is primarily concerned with classification. Suppose that someone looks at a square drawn on a blackboard and asks, “Why is this figure a square?”\(^{48}\) The questioner seems to be searching for some sort of \( \alpha \iota \tau \iota \alpha \), but what kind? We get a clue by looking at what might be considered an acceptable answer to the question. Someone could appropriately respond that the figure is a square because it has four equal sides and four equal angles. The answer does not address how this particular chalk square came to be, so it does not provide a cause. Instead, the response tells us the logical conditions necessary for classifying the figure as a square; the response provides a
logical aitia. A logical aitia tells us why something is a member of a certain class, and therefore why it is proper to label it as such. So the logical aitia of my neighbor’s dog would include all of the conditions required for it to be called a dog, such things as its being a mammal, its being a living thing, etc. It is because of these characteristics that it can properly be called a dog, and so these characteristics are its logical aitia. Of course, as Vlastos points out, logic always has metaphysical implications for Plato. So rather than simply using the term logical aitia, he suggests that it would be more proper to describe these as logico-metaphysical aitia.

He believes that this interpretation of the safe answer finds two pieces of support in the text. First, his interpretation explains why the safe answer is described as ἀμαθή (ignorant) at Phaedo 105c. He takes this to mean that the safe answer is simply “uninformative.” It tells us nothing that we didn’t already know. In order to ask why the figure is a square, we must first have known that it was a square. So on some level, conscious or not, we already knew the conditions for being labeled as a square, because we were able to identify the square as a square in the first place. Therefore, if someone responds to our question about why it is a square by identifying the conditions necessary to label it as such, he has told us nothing we didn’t already know. Perhaps his answer illuminates something we couldn’t articulate before we asked the question, but no new information is provided at all. The answer is ignorant because it is uninformative.

Secondly, Vlastos supports his interpretation of the safe answer by showing that it clarifies how the safe answer is supposed to be a response to some of the puzzles of Phaedo 96d-e. The safe answer effectively dissolves several of these puzzles by showing that they are not matters of causation at all, but of classification. For example, one man or horse is not taller

\[48\text{Vlastos discusses this example on pages 90-1 of “Reasons and Causes.”}\]
than another because of some cause (such as a head), but because he meets the logical conditions necessary for classifying him as taller. Similarly, ten exceeding eight and two cubits exceeding one cubit do not require a cause, but a logico-metaphysical αἰτία. The addition and division which produce two can, with the safe answer, be seen as logico-mathematical conditions, rather than physical processes. And so they do not need to be explained by any cause. The pair is a pair because it meets the logical conditions to be classified as a pair, not because of the physical proximity or remoteness of any component units. And in the same way, beautiful things are classified as beautiful because of logico-metaphysical conditions, not because of any beauty-creating cause. Effectively, all of these puzzles have been dissolved, because all of them have been reduced to questions of logical classification rather than of causation.

In the previous chapter, I have already provided an alternative explanation of why Socrates describes the safe answer as ἀμαθῆ. (Rather than meaning ignorant or uninformative, here the word simply means simplistic, plain or uncomplicated.) So I will focus my response to Vlastos on his claim that the safe answer dissolves the aetiological puzzles that Socrates has been exploring. I think there are at least two pieces of textual evidence that challenge this interpretation. First, Vlastos only examines the aetiological puzzles of 96d8-e4, ignoring the earlier ones which began at 96b. These include such questions as how living things are nurtured, how they think and how human growth occurs. Surely these questions are not reducible to matters of classification. No mere logico-metaphysical αἰτία will answer them. They require a cause. Yet these are the first questions Socrates puts forth in his discussion of aetiology. And while he tells us that he has given up on “the old method of investigation” (97b), he never indicates that he has abandoned the questions he was originally investigating. Presumably, the
new method of investigation is a new way of answering the same old questions. But if Vlastos is correct about the nature of Plato’s αἰτία, then they aren’t capable of answering the earlier questions in any way. Logical classification does not account for the nurture of living things or the growth of the human body. So if we were to follow Vlastos’ interpretation, we would have to believe that Socrates not only abandons his old method, but the very questions he originally wished to answer. And this finds no basis in the text.

Secondly, Socrates began the passage on aetiology as part of an attempt to answer Cebes’ question concerning whether the soul perishes with the body. At the very beginning, Socrates said that answering this question “requires a thorough investigation of the αἰτία of coming to be and destruction” (95e). But if Vlastos is correct, then what follows provides an αἰτία of neither coming to be nor of destruction. Instead, Socrates only arrives at a way of understanding logical classification. And while this might account for why something is as it is, it surely does not account for how it comes to be or is destroyed. So, if we accept Vlastos’ interpretation, then we must say that the introduction to the passage is misleading, and that Socrates ultimately ends up exploring subject matter other than that which he says is required in order for him to answer Cebes.49

One might defend Vlastos by arguing that Socrates did start out looking for the αἰτία of coming to be and destruction, but when he could not find it, he turned to a different sort of αἰτία that would still allow him to answer Cebes. However, this defense is incompatible with the text. Socrates does not decide to abandon the αἰτία of the materialists during the course of his discussion with Cebes. Rather, according to his own account, he had abandoned them before this

49 A similar argument can be found in Byrne, 5-6.
dialogue began. Since abandoning it, he had become enamored with and then disappointed in Anaxagoras. So quite some time had passed. Therefore, when he says that answering Cebes will require a thorough investigation of the αἰτία of coming to be and destruction, he isn’t speaking naively, but with his mature aetiology already in mind. So we should expect that the aetiology which follows will account for coming to be and destruction, which a merely logico-metaphysical αἰτία would not. If we take seriously Socrates’ claim that he must *thoroughly* investigate the αἰτία of coming to be and destruction, then we cannot accept Vlastos’ interpretation that what follows is merely an examination of the conditions for logical classification. Even if that might have causal implications, it certainly does not provide a *thorough* account of coming to be and destruction.

And Socrates makes it quite clear that he is still talking about how things *come to be* in the safe answer:

> This is the safe answer for me or anyone else to give, namely, that it is through Beauty that beautiful things are made [γίγνεται] beautiful. (100e)\(^50\)

Then would you not avoid saying that when one is added to one it is the addition and when it is divided it is the division that is the cause of two [τοῦ δόο γενέσθαι]? And you would loudly exclaim that you do not know how else each thing can come to be [γενέσθαι] except by sharing in the particular reality in which it shares, and in these cases you do not know of any other cause of becoming [γενέσθαι] two except by sharing in Twoness.… (101c)

Four times, Socrates assures us that his safe answer deals with how things come to be, not merely with the logical conditions for their classification.

So we ought to think that Socrates is searching for the sort of αἰτία that are responsible for the coming to be of their effects. He is looking for *productive* αἰτία, and therefore something

\(^50\) Grube translates *γίγνεται* as “are made,” but it would be more accurate to translate it as “come to be.” The OCT includes *γίγνεται* in its preferred text, but also indicates that it is absent from three of the manuscripts. However, two of the manuscripts that do include it also include an additional occurrence a few lines earlier, which is not
like what we would call *causes*. This is consistent with his view in other dialogues that αἰτίαι in general are makers:51

And is it not the case that there is no difference between the nature of what *makes* [ποιούντος] and the *cause* [αἰτίας], except in name, so that the maker [ποιοῦν] and the cause [αἰτιον] would rightly be called one? (Philebus 26e)

And the maker [ποιοῦν] is nothing else than the cause [αἰτιον], isn’t it? (Greater Hippias 296e)

…we said production [ποιητικήν] was any capacity that causes things to come to be [αἰτία γίγνηται] that previously were not. (Sophist 265b)

Notice that both feminine and neuter αἰτίαι are identified as makers.

In the *Phaedo* itself, when Socrates discusses the aetiology he had hoped to find in Anaxagoras, we get our first hint that a proper aetiology *might* involve some sort of maker acting upon things. For each thing, “one had to find what was the best way for it to be, or to be acted upon [πάσχειν], or to act [ποιεῖν]” (*Phaedo* 97c-d). At this point, Socrates was still unsure whether something else acts upon things to make them as it is best for them to be, or they themselves act to accomplish this. But when he discovered his safe answer, he was able to resolve this question. According to the safe answer’s account of why a beautiful thing is beautiful, “nothing else makes [ποιεῖ] it beautiful other than the presence of, or the sharing in, or however you may describe its relationship to that Beautiful…” (100d) The beautiful things do not act to make themselves beautiful, since the form of Beauty, and *nothing else*, makes them beautiful. Rather, they are beautiful because the form acts upon them and makes them to be so. Beauty *produces* its instances in things.

51 The three instances of this claim are identified and discussed in Blackson, 9. I take Plato to be saying something similar at Timaeus 67b, where he wants to discuss hearing and the causes that bring about its properties [ὢς αἰτίας τὰ περὶ αὐτὸ συμβαίνει παθήματα].
A similar claim is made concerning the form of the Appropriate in *Greater Hippias* at 294d. “Therefore, if the appropriate [τὸ πρέπον] is what makes [ποιοῦν] things fine, it would be the fine we’re looking for….“ So both in the *Phaedo* and elsewhere, Plato tells us that forms are makers.

Remember that in this dissertation, an active cause means one that does something and thereby produces (in the sense of bringing about) an effect in something else. We have not yet explored what the forms might be doing, though that question will receive some attention in the next section. But in the examination of the safe answer, there are at least three pieces of evidence that Socrates attributes production of effects to forms. First, at 100e and 101c, he makes it clear that his safe αἰτία, the forms, are meant to account for how things come to be, which implies production. Secondly, he identifies the forms as αἰτία, which according to at least three other dialogues (*Philebus*, *Greater Hippias* and the *Sophist*) implies that they are makers. And thirdly, at 100d, he tells us explicitly that the form of Beauty makes beautiful things beautiful. So forms do produce their effects, though it is not yet clear how they might be doing this. To shed some light on that question, we must turn to the more refined answer.

4. Forms as Active Causes in the More Refined Answer

In presenting his more refined answer, Socrates does not use the word αἰτία at all. But this is largely because the word is no longer necessary. I have argued in the previous section that the forms are the αἰτία in his safe answer. And prior to that, in the first chapter, I argued that the more refined answer is simply a further development of the safe answer. So Socrates no longer
needs the word αἰτία. He has already found the αἰτία for which he was searching, and is now simply refining his account of how they do what they do. And I say “what they do” quite intentionally, since Socrates’ account of the more refined answer has forms doing quite a lot. In this section, I will examine the language Socrates uses to describe the relationship between forms and particulars and argue that this is good reason to consider forms active causes.

First, it is important to notice that, as in the safe answer, Socrates is still concerned with his original goal of knowing for each thing why it “comes to be or perishes [ἀπολλυται] or exists” (96a, 97b, 97c). The same verb for perishing/destruction is used again in the more refined answer, when an account of destruction is given at 102d-104c:

…tallness in us will never admit the short or be overcome, but one of two things happens: either it flees and retreats whenever its opposite, the short, approaches, or it is destroyed [ἀπολλείναι] by its approach. (102e)

This is only one of six instances of the same verb being used in this way at 102d-104c.52

This obvious reference to the original question reassures us that the same topic is still under consideration. Socrates is still discussing how things come to be and how they are destroyed. He has already identified forms as the αἰτία, but now he wants to give further exploration to how they are αἰτία. How do they bring about coming to be and destruction?

Destruction, he tells us, results from the approach of a form that is incompatible with the thing destroyed:

What I want to make clear is this: not only do those opposites not admit each other, but this is also true of those things which, while not being opposite to each other yet always contain the opposites, and it seems that these do not admit that Form which is opposite to that which is in them; when it approaches [ἐπιούσῃ] them, they either perish or give way. (104b-c)

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52 One is at 103a, and there are two each in 103d and 104c.
A form, in some sense, “approaches” those things which are destroyed by it. For example, a group of three things could be destroyed by the approach of the Even (104c). Three and Even are not opposites, but wherever there are three things, they will always be odd, and Odd is the opposite of Even. Because the group of three things must be odd, it cannot admit the form of the Even. So if that form approaches them, they will either “perish or give way,” i.e. they will cease to be a group of three things. While we should not think of this approach as an increase in spatial proximity, clearly the form is doing something approach-like which results in the destruction.

At 104d, we are given the following clarification about what sorts of things will not receive their opposites:

Would they be the things that are compelled \(\alpha\nu\alpha\gamma\kappa\acute{a}\zeta\omega\) by whatever occupies \(\kappa\alpha\tau\alpha\sigma\chi\eta\) them not only to contain that thing’s Form but also always that of some opposite? – How do you mean?  

As we were saying just now, you surely know that what the Form of three occupies \(\kappa\alpha\tau\alpha\sigma\chi\eta\) must not only be three but also odd. – Certainly.

Here, there is mention of certain things that occupy and compel. And the first example of such a thing is the form of Three. But if this form occupies and compels, then surely it is doing something. The next line of the text reveals the same thing. “And we say that the opposite Form to the Form that achieves \(\alpha\pi\epsilon\rho\gamma\acute{a}\zeta\tau\tau\alpha\iota\) this result could never come \(\acute{e}l\theta\omega\iota\) to it. – It could not.” Here, Grube translates the verb \(\alpha\pi\epsilon\rho\gamma\acute{a}\zeta\omai\) as achieve, but this downplays what the form is actually doing. Better translations would be make, cause or produce. The form is doing something, and in fact something that produces a result. The second significant verb \(\acute{e}r\chi\omicron\muai\) is applied to the form in the negative. However, the implied reason why the form cannot come to

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53 More will be said about this soon.
an instance of its opposite is that it is opposite to it, not that the form is inert altogether. In fact, the implication of this sentence is that the form *does* come to other things.

The very next line asks, “Now it is Oddness that has done [εἰργάζετο] this? – Yes.” Again, the production of an effect is attributed to a form, and this time with an even stronger verb. The verb ἐργάζομαι carries the sense of making, laboring, working or building. It is the same verb Plato uses in the allegory of the cave in the *Republic* to describe the “statues of people and other animals, made [εἰργασμένα] out of stone, wood, and every other material” (514c-515a). This suggests that Oddness does something to a group of three things that is akin to what a sculptor does in shaping a statue.

Furthermore, we are told four times that certain forms *bring* other forms into whatever they occupy:

…the triad, though it is not the opposite of the Even, yet does not admit it because it always brings along [ἐπιφέρει] the opposite of the Even, and so the dyad in relation to the Odd, fire to the Cold, and very many other things, see whether you would define it thus: Not only does the opposite not admit its opposite, but that which brings along [ἐπιφέρη] some opposite into that which it occupies, that which brings this along [ἐπιφέρον] will not admit the opposite to that which brings it along [ἐπιφερομένου]. (104e-5a)

So, for example, Fire always brings along Heat, so that wherever there is a fire, it will be hot. Fire is not the opposite of Cold, but it brings along Heat, which is the opposite of Cold. Therefore, no fire can ever admit the Cold while remaining a fire. As long as it remains fire, it must be hot, and it could only become cold by ceasing to be a fire. And all of this is because Fire *brings along* Heat with itself.

Three times, we are told that forms come into things:

For if you ask me by what coming into [ἐγγένηται] the body it is hot, I do not put to you that safe but foolish thing, that it is Heat, but now a more refined thing, that it is Fire. Neither if you ask by what coming into [ἐγγένηται] the body it is ill will I answer Illness, but that it is Fever. Nor by
Here, the forms of Fire, Fever and Unity are all said to *come into* things. Obviously we shouldn’t think of this *coming into* in spatial terms, but forms come into things in the sense of making themselves present in those things. And by coming into things, and bringing along other forms with themselves, they produce effects. For example, when Fever enters a body, it always brings along Illness with itself. This means that a body will not only be fevered, but ill as well, whenever the form of Fever comes into it. Therefore, forms *do* something (they come into a thing), and they thereby produce an effect in that thing (such as hotness, illness or oddness).

In fact, Socrates says this sort of thing as early as his discussion of materialism. At 99c, Socrates criticizes the materialists because “they do not believe that the truly good and ‘binding’ binds [συνδέων] and holds [συνέχειν] them together.” Here, Socrates attributes two active voice infinitives to the Good itself.

So it seems that the forms do far more than merely serving as patterns for their instances or providing conditions for logical classification. They *do* things by which they produce various effects. They approach [ἐπειμι] or come to [ἐρχομαι] things, sometimes bringing along [ἐπιφέρω] other forms. They occupy [κατέχω] things, bind [συνδέω] them and hold [συνόχοικα] them, and thereby they compel [ἀναγκάζω] them to be what they are, so that we can say that they have done [ἐργάζομαι] or produced/caused/made [ἀπεργάζομαι] the result.

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54 I am providing my own translation, since Grube’s translation obscures the relevant grammar.

55 Richard Mohr claims an even earlier example. He interprets 84a-b to say that the forms nourish the soul, a claim which he also finds at *Republic* 490b and 611e as well as *Phaedrus* 247d-e and 249c. He then concludes that “even with allowances made for mythical speech, it is hard to know how to construe these claims if they do not entail causal efficacy on the part of the Forms.” Richard Mohr, *The Platonic Cosmology*, Philosophia Antiqua monograph series (Leiden, the Netherlands: E. J. Brill, 1985), 80. However, it is not clear to me that any of the passages cited by Mohr clearly attributes nourishing to the forms themselves.
Of course, we shouldn’t think of the forms as approaching things in a spatial way, or
binding them materially, or compelling them in some mechanical sort of way. Socrates is using
metaphor, and speaking in an inexact and analogical way. However, these metaphors make it
clear that in the Phaedo, the relationship between forms and particulars is not expressed entirely
in terms of particulars turning to forms, but much more often in terms of forms doing something
that produces effects in particulars. Others have noticed the same thing. Commenting on
aetiology in the Phaedo in 1971, M. J. Cresswell wrote,

The emphasis in our passage is that x is φ because φ-ness does something to x and the metaphor
used is of the Form coming upon something (προσίεναι, cf. e.g. 102e1, 103d7, d10, 104b10, c7)
and by its very presence (κοινωνία, παρουσία) cf. 100d5, 6) forcing the thing to have its quality.56

Similarly, commenting on the same passage in 1975, Henry Teloh wrote,

But in the Phaedo passage previously discussed, the language of activity, force, and possession
dominate in conjunction with the immanence of forms in phenomena. Forms possess (κατάσχει)
particulars, compel (ἀναγκάζει) them to acquire certain qualities, bring with them other Forms,
and repel yet others (Phaedo 104c).57

And in 1989, David White wrote,

Forms actively constitute particulars, and particulars in turn are acted upon by the Forms in
receiving their degree of reality; this duality illustrates that aspect of teleological causality by
which a thing’s active and passive properties determine its nature….58

Because the forms do something and thereby produce their effects in other things, they fit our
definition of active causes.

Here is another important consideration: Suppose that, as I have argued, Plato’s Socrates
intends to say that the forms are active causes. There are a limited number of straightforward
ways to do this in Greek. The four most obvious ways would be: 1) to use the word aitia, 2) to

56 The italics are Cresswell’s, as is the lack of parity in the parentheses. Cresswell, 246.
57 Teloh, 21.
58 David White, 181.
use a διά construction, 3) to use a dative of agent or 4) to use a distinctively agent verb, such as ποιέω. And, in fact, Plato’s writing does all four of these in our passage. Forms of the word αἰτία are used over thirty times. The διά construction can be found at 101a, which tells us that big things are big “διὰ τὸ μέγεθος” and small things are small “διὰ τὴν σμικρότητα.” And at 101b, ten exceeds eight “διὰ τὸ πληθος.” The dative of agent construction appears at 100d, where the text says that “τῶ καλῶ πάντα τὰ καλὰ καλὰ.” And ποιέω is used a few lines earlier (also in 100d) to express the safe answer “that nothing else makes [ποιεῖ] it beautiful other than the presence of, or the sharing in, or however you may describe its relationship to that Beautiful we mentioned…. So Plato has used every available means of telling us that the forms are active causes.

Vlastos notes that all of these constructions are used, but suggests that none of them should be read as having any causal implications in this passage. He argues that αἰτία doesn’t mean cause. He dismisses the dative constructions as being only instrumental datives.\(^\text{59}\) He shows that the διά constructions are in parity with the single use of ποιέω and then argues that the “makes” here is not a causal making. Instead, it is like when we say that a gay color makes something gay. The making isn’t causal, but only indicates that the gayness of the thing consists in its gay color.\(^\text{60}\)

But this means that, even if Plato is trying to talk about causes, Vlastos has explained away every possible way of doing it. If Plato had only used one or two of these ways of speaking, then perhaps it would be a mistake to assume that he is talking about causes.

\(^{59}\) Vlastos, “Reasons and Causes,” 146.

\(^{60}\) Ibid., 149. The example of the gay color appears in Vlastos’ quotation of F. M. Cornford, Plato and Parmenides (London, 1939), 77 ff.
However, he employs every possible means of saying it, and this ought to make us take the claim that forms are causes more seriously. The semantic gymnastics that Vlastos must do to explain all of this away begins to strain credibility.

Again, Plato uses every possible means to express that the forms are causes. Yet beyond all of the semantics, we must again consider what Socrates set out to do. He wanted to find the αἰτία of coming to be and destruction. In fact, he said that such an investigation was required for his final argument for the immortality of the soul. And as I showed at the beginning of this section, he made it clear that he was still discussing coming to be and destruction at the end of the passage. These can only be explained by the sorts of αἰτίαι that are productive and destructive. Therefore, since the forms are his αἰτίαι, we cannot think of them merely as inert patterns, but must instead consider them to be productive causes. And since he has told us (albeit metaphorically) what they do to produce their effects in something else, they perfectly fit our definition of active causes.

But what is the reality behind the metaphors? If forms do not literally approach things, bind them, compel them, etc., then what are they really doing? Can we speak in a less figurative way about the activity of the forms? For his part, Socrates does not. When addressing how forms act on particulars, he says, “…I will not insist on the precise nature of the relationship….\(^\text{61}\) (Phaedo 100d).

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\(^{61}\) It is important to note that Socrates had already discovered both the safe and more refined answers prior to the entire aetiological discussion in the Phaedo, and is merely recounting how he arrived at them. So when he is presenting the safe answer and tells us at 100d that he isn’t sure about the precise nature of the relationship between forms and particulars, we should read that to mean that even after having developed the more refined answer, he still isn’t sure. As we have seen, the more refined answer does provide a bit more detail about how forms and particulars interact. But the precise nature of the relationship continues to elude Socrates, even at the end of the discussion.
I suspect that Socrates does not give us a literal account of this relationship because it would be impossible to do so. All of our causal language is based on a framework that assumes interaction between particulars. In this framework, one particular acts upon another, and since both entities have the same ontology, we could say that this is a horizontal sort of causation, the kind attributed to the physicists in the *Phaedo*. But Socrates has rejected the horizontal framework of the physicists in favor of a more vertical causal framework. Forms, which belong to a higher ontological order, act in a downward sort of way on particulars; the cause and effect do not share the same ontology. This vertical understanding of causality is well-expressed in the quotation from Skemp that I included at the beginning of this chapter:

> We must remember that αἰτία never means a previous event related causally to a subsequent, but an active agency of a higher order of reality which is literally “responsible for” the physical event.  

Because our causal language assumes a horizontal sort of causation, it is inadequate for describing vertical causation and Socrates must resort to using the language of horizontal causation metaphorically if he is to talk about vertical causation at all. Lloyd Gerson, speaking of Platonism, but not of Plato himself, writes that “the differences between the true causes and their effects mean that epistemologically one proceeds from effects that can be described in perceptible terms to causes that are utterly incapable of being so described.” We simply do not have the language to talk about the activity of forms in a literal way. So we must always speak of it in metaphor.

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62 I will have much more to say about the differing ontologies of forms and particulars in the next chapter.

63 Skemp, 71.
5. Summary

The goal of this chapter was to show that forms are active causes in the *Phaedo*. I did this by arguing (against Yonezawa) that the forms are Plato’s αἰτίαι and (against Vlastos et al.) that this word is best translated as *cause*. In fact, I showed that Plato uses every means available to him to say that the forms are causes. I also presented two arguments that the forms are *active* causes, in the sense that they *do* something, and thereby *produce* an effect in something else.

First, I showed that in discussing participation, Plato does not assign all of the verbs to the particulars, which would have implied that participation is simply a matter of particulars turning to forms as patterns. Instead, Plato assigns a number of verbs to the forms, showing that they have some sort of agency in the relationship of participation. Forms *do* something, and thereby *produce* effects in particulars. And secondly, I argued that if the forms are anything less than active causes, then they cannot be the αἰτίαι of coming to be and destruction, which the text assures us they are. So, at least in the *Phaedo*, forms are presented as active causes. And in the next chapter, I will show that this view extends beyond the *Phaedo* as well.

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Chapter Three

Forms as Active Causes in the *Timaeus*

In the second chapter, I argued that the forms are active causes in the *Phaedo*. In this chapter, I will make the case that Plato continued to present them as active causes in the *Timaeus*. The *Timaeus* has a great deal to say about how things come to be, and at first glance, it seems that the forms do nothing more than to serve as a model for the ordering work of the cosmic Demiurge. However, I will argue that that reading is mistaken and that in this late dialogue, Plato continues to hold that forms are active causes.

My case will rest on two lines of argument. First, I will examine the relationship between the Demiurge and the forms and argue that Plato intends the Demiurge to be a representation of the forms, considered as a single unified network. In other words, when the Demiurge is said to be the maker of the cosmos, this is simply another way of saying that the forms are the makers. And this suggests that the forms are active causes.

Secondly, the *Timaeus* reiterates an ontological distinction, established in earlier dialogues, between the *being* of the forms and the *coming to be* of particulars. I will explore how these two ontological statuses differ and how their relationship is illuminated by the *Timaeus’* introduction of “the Receptacle of all becoming.” I will then argue that particulars are entirely dependent upon the forms in such a way that they must be produced by the forms. And since the forms produce particulars, they are active causes.
The fact that Plato expresses all of this in a myth or “likely account” (29c) suggests that, as in the *Phaedo*, he is still not sure precisely how forms are able to act as causes. But, as in the *Phaedo*, he presents them as causes nonetheless.

1. The Demiurge and His Model

In the *Timaeus*, the title character tells us that “everything that comes to be must come to be by the agency of some cause [αἰτίου]” (28a). And since the cosmos came to be (28b), it too must have a cause. He calls this cause the Δημιουργός, usually translated as *Craftsman* or simply transliterated as *Demiurge*. The Demiurge is an orderer and beautifier who arranges the cosmos in accordance with his changeless model, the forms. In this section, I will examine what the text says about the Demiurge’s model as well as the Demiurge himself and I will then argue that the Demiurge and his model are one and the same. In antiquity, this interpretation was held by Plotinus, Proclus and others, and it seems to have remained common into the early 20th century, though as we shall soon see, several other interpretations of the Demiurge have been suggested.

My own argument that the Demiurge and the model are one will take the following shape:

Premise: Model = Forms  
Premise: Demiurge = Model  
Conclusion: Demiurge = Forms

Since the Demiurge is the cause whose agency ordered the cosmos, showing that he is a representation of the forms will demonstrate the causal agency of the forms.

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1 “Early this century it was common to believe that the forms were the only sources of intelligible order for Plato and that Timaeus’ description of the demiurge personifies the forms in general.” Stephen Menn, “Plato on God as Nous,” *Journal of the History of Philosophy* monograph series (Carbondale and Edwardsville: Southern Illinois University Press, 1995), 6.
i) The Model

Timaeus begins his account of the ordering of the cosmos by making a general point about models (παραδείγματα):

…whenever the craftsman looks at what is always changeless and using a thing of that kind as his model, reproduces its form and character, then, of necessity, all that he so completes is beautiful. But were he to look at a thing that has come to be and use as his model something that has been begotten, his work will lack beauty. (28a-b)

He is not yet talking about the ordering of the cosmos in particular, since he does not resolve until the end of 28b whether the cosmos came to be at all, or whether it has always existed. And neither is he yet speaking of the cosmic Demiurge. Instead, he simply tells us that “whenever” something is completed, if the craftsman uses a changeless model, it will be beautiful, but if he uses a model that comes to be, the result will lack beauty.

He then applies this principle to the ordering of the cosmos in particular and to the cosmic Demiurge:

Which of the two models did the maker use when he fashioned it? Was it the one that does not change and stays the same, or the one that has come to be? Well, if this world of ours is beautiful and its craftsman good, then clearly he looked at the eternal model. (29a)

Some take this to mean that the cosmic Demiurge had a choice between two models, one changing and one that came to be. But that need not be the case. This passage simply recalls what was said at 28a-b about the two sorts of models any craftsman could use and asks which sort of model was used by the cosmic Demiurge. The beauty of the world then testifies to the fact that his model was changeless. And this does not require that there was any alternative model for the Demiurge to consider.

It is interesting that the Demiurge uses a single model to craft the entirety of the cosmos.

In other dialogues, Plato has been concerned with how individual things within the cosmos come
to be what they are, e.g. how individual hot things came to be hot, how tall things came to be tall, etc. And the answer has typically assigned responsibility to an individual form. But here, he investigates how the whole of the cosmos came to be, and the model is not some individual form, but a single model constituted by all of the forms considered together. It seems that individuals are modeled on individual forms, but the whole of the cosmos is modeled on the networked whole of the forms.

In the *Timaeus*, the forms constitute an indivisible, interwoven whole. Explaining how the Demiurge concocted soul, between the being of the forms, and the coming to be of the visible, Timaeus tells us that

> In between the *Being* that is indivisible [ἀμερίστου] and always changeless, and the one that is divisible [μεριστῆς] and comes to be in the corporeal realm, he mixed a third, intermediate form of being, derived from the other two. (35a)

Unlike coming to be, being is said to be *indivisible*. It is a single, unified whole. And therefore the forms which constitute it cannot be separated from each other, as though they were atomistic individuals, but instead are always a networked whole.

The interrelation of the forms can already be seen in the *Phaedo*. At 104a-105b, we learn that the forms are not independent of one another. As discussed in the previous chapter, the form of Three always brings along the Odd with it. The *Phaedo* also tells us that Five will never admit the Even and that Ten will never admit the Odd. The implied reason for this is that Five always brings along the Odd with it and therefore cannot admit its opposite. Ten always brings along the Even and cannot admit its opposite. These forms are not entirely independent of each another, but interrelated.

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2 For example, see Mary Louise Gill, “Matter and Flux in Plato’s *Timaeus*,” *Phronesis* 32 (1987), 38.
There is evidence of the same view in the *Sophist*. Commenting on the ability of forms to associate with one another, the Eleatic Visitor says the following:

We’ve agreed on this: some kinds will associate with each other and some won’t, some will to a small extent and other will associate a great deal, nothing prevents still others from being all-pervading – from being associated with every one of them. So next let’s pursue our account together this way. Let’s not talk about every form. That way we won’t be thrown off by dealing with too many of them. Instead let’s choose some of the most important ones. First we’ll ask what they’re like, and next we’ll ask about their ability to associate with each other. (254b-c)

Dimitri Nikulin finds the same point made a little later in the *Sophist* at 257a, when the Eleatic Visitor says that “it’s the nature of kinds to allow association with each other.” The word used here for *kinds* is ὁμολογούν, though in context, it does seem that the point applies to forms, which are mentioned only a few lines earlier at 256e.

Eric Perl draws attention to a passage only a little later in the *Sophist* (at 259d-e), which, according to his interpretation, indicates that the forms are to be understood as a cohesive, interwoven whole, and not as “merely a collection of atomistic entities.” Theaetetus and the Eleatic Visitor are discussing which forms can be blended together and which cannot:

Visitor: In fact, my friend, it’s inept to try to separate everything from everything else. It’s the sign of a completely unmusical and unphilosophical person.

Theaetetus: Why?

Visitor: To dissociate each thing from everything else is to destroy totally everything there is to say. The weaving together of forms is what makes speech possible for us.

So in the *Sophist*, forms are not disjointed and entirely separate from one another. Instead, they are blended and interwoven. The forms exist in relationship with one another, so that together

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3 Dimitri Nikulin, “Plotinus on Eternity” in *Timée de Platon: contributions à l’histoire de sa réception*, ed. Ada Neschke-Hentschke, Bibliothèque philosophique de Louvain, no. 53 (Paris: Éditions Peeters, 2000), 19. As further evidence of the intertwined nature of the forms, Nikulin also cites *Parmenides* 144e and *Republic* 476a, though in my opinion it is much less clear that those passages help to make the point.

they constitute an integrated whole. This is why, in the Timaeus, the forms can be treated as a single model.

To add to this picture, we are told at Timaeus 30c that the model is a living thing:

When the maker made our world, what living thing [ζωον] did he make it resemble? …that Living Thing [ζωα] of which all other living things are parts, both individually and by kinds. For that Living Thing [ζωα] comprehends within itself all intelligible living things…. Since the god wanted nothing more than to make the world like the best of the intelligible things, complete in every way, he made it a single visible living thing.…

The forms are still the model, since this passage tells us twice that the model is composed of intelligible things. But it is also, in some sense, a living thing. The text does not explain what it means for the forms to be a living whole, but the idea is not unique to the Timaeus. Perl finds it in the Sophist as well.⁵ At 248e, Theaetetus and the Eleatic Visitor are discussing the nature of being, which they associate with the forms:

Visitor: But for heaven’s sake, are we going to be convinced that it’s true that change, life, soul and intelligence are not present in that which wholly is, and that it neither lives nor thinks, but stays changeless, solemn, and holy without any understanding?

Theaetetus: If we did, sir, we’d be admitting something frightening.⁶

Maybe this passage only adds to the puzzle, since in addition to suggesting that the forms live, it also implies that they think and change.⁷ But it does serve to show that Plato contemplated the forms as a living thing in more than one of his works.

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⁵ Ibid., 87-8.

⁶ Note that the text does not say that being is a soul, but that soul is present in it.

⁷ An alternative interpretation is offered by Skemp, 15-21. He claims that Plato is not placing thought and life in the forms, but rather expanding his understanding of being beyond the forms. In addition to the forms, being now contains other things, such as souls, which live and think. A similar interpretation is also offered by Sweeney, “Participation in Plato’s Dialogues,” 134-7. However, Skemp admits that it is difficult to reconcile his reading with the fact that Motion is a form in the subsequent paragraphs of the Sophist, and being is still clearly identified with the forms in the Timaeus.
Perhaps the only indication in the *Timaeus* of why the forms are a living thing is at the end of the passage from 30c, quoted above. “Since the god wanted nothing more than to make the world like the best of intelligible things... he made it a single living thing....” Maybe Plato reasoned that because the cosmos is a living thing, and resembles its model, the model itself must be a living thing as well. Narratively, the Demiurge reasons in the opposite direction, beginning with a living model and concluding that the cosmos ought to be a living thing too. But it could be that in the order of discovery, Plato himself began with a living cosmos and concluded that the model must live as well.

In any case, we have seen that the Demiurge’s model is a living whole, constituted by the forms. And we may now turn to a consideration of the Demiurge himself.

**ii) The Demiurge (And What He is Not)**

As I have already mentioned, at 28a Timaeus explains that everything that comes to be does so through the agency of some cause. And then he makes the general point that if a craftsman uses a changeless model, what he produces will be beautiful. At 28c, all of this is applied to the cosmos as a whole and we are told for the first time that the cosmos too has a craftsman. “Now to find the maker and father of this universe [*to pan*] is hard enough, and even if I succeeded, to declare him to everyone is impossible.” He is first called the *maker* and *father*,

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8 Eugenio Benitez uses the fact that the model is a living thing to argue that the Demiurge and his model are one. But much more needs to be said before I am ready to make that case myself. Eugenio E. Benitez, “The Good or the Demiurge: Causation and the Unity of Good in Plato,” *Apeiron* 28 (1995), 128.

9 The *to pan* appears in brackets in Zeyl’s translation, which I am using here.
and then only a few lines later (at 29a), he is described for the first time as the Demiurge. “...of causes the craftsman [δημιουργὸς] is the most excellent.” He is not called Demiurge again until 41a, since the text much more often refers to him as the maker or the god, and uses other descriptors as well. So it is somewhat surprising that the secondary literature most often refers to him as the Demiurge. But following convention, I will refer to him by that name too.

The Demiurge appears in several of the late dialogues, and we might well ask why Plato has introduced this figure into his metaphysics. I suggest that, at least in the context of the Timaeus, he adds the Demiurge for the same reason that he adds the cosmic model. Earlier dialogues only considered the coming to be of individual things, and therefore only needed to discuss individual forms as models. But in the Timaeus, Plato wants to talk about the coming to be of the cosmos as a whole. And therefore it is necessary to introduce a single model composed of all of the forms. Similarly, when Plato was only considering the coming to be of individual things, it was only necessary to consider individual forms as makers (as we saw in the Phaedo). But now that he wants to talk about the coming to be of the cosmos as a whole, it is necessary to have a single maker, and that is the function of the Demiurge.

He is also a fulfillment of the wish that Socrates expressed in the Phaedo. Socrates had been intrigued by Anaxagoras’ claim that mind (νοῦς) orders all things. His primary interest in this notion was that if it were so, then everything would be ordered in accordance with “what was best” (97c-98b). I argued that this hope was partially fulfilled in the Phaedo, but it is more

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11 Because the treatment of the Demiurge in other dialogues is quite brief, usually amounting to nothing more than a passing mention, there is little ground for speculation about whether or not my account of why he is introduced in the Timaeus applies to those dialogues too.
completely fulfilled in the *Timaeus*. The Demiurge “wanted everything to be good” and would not “do anything but what is best” (30a). And after discussing the work of the Demiurge, *Timaeus* tells us that “I have presented what has been crafted by Intellect [νοῦ]” (*Timaeus* 47e). In the *Timaeus*, everything is directed by the Demiurge toward what is best, and in accordance with νοῦς, just as Socrates had hoped. So in a way, the Demiurge of the *Timaeus* fulfills the hope Socrates had expressed in the *Phaedo*.\(^\text{12}\)

But what exactly is the Demiurge? Harold Cherniss points out that Aristotle never treats the Demiurge as a significant element of Plato’s doctrine.\(^\text{13}\) It seems unlikely that this is simply an oversight on Aristotle’s part. So this suggests that the Demiurge is likely another name for some more familiar Platonic principle. In antiquity, many of the Middle Platonists identified the Demiurge with the soul of the cosmos.\(^\text{14}\) And in modern times, Cherniss and others have interpreted the Demiurge to be a soul of some kind.\(^\text{15}\) Cherniss argues that since the Demiurge has νοῦς and νοῦς can only be in a soul, the Demiurge must be a soul.\(^\text{16}\) If the Demiurge were

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\(^{13}\) Harold Cherniss, *Aristotle’s Criticism of Plato and the Academy* (Baltimore: The Johns Hopkins Press, 1944), 609-610.


not a soul, then he could not possess νοῦς. But why does Cherniss think that νοῦς can only be in a soul? This premise seems to be supported by a number of passages:17

…he further concluded that it is impossible for anything to come to possess intelligence [νοῦν] apart from soul. (Timaeus 30b)

…the necessary result is understanding [νοῦς] and knowledge. And if anyone should ever call that in which these two arise, not soul but something else, what he says will be anything but true. (Timaeus 37c)

We must pronounce the soul to be the only thing there is that properly possesses understanding [νοῦν]. (Timaeus 46d)

Truly wisdom and reason [νοῦς] without a soul could never come to be.18 (Philebus 30c)

Now are the things that have sense [νοεῖτα νοοῦντα] those that have soul, or do things without soul have sense too? It is the ones with soul that have sense. (Euthydemus 287d)

However, Stephen Menn has pointed out that none of these passages really supports Cherniss’ contention that νοῦς can only exist in a soul. Instead, each simply tells us either that νοῦς can only come to be in souls, or that only souls can possess νοῦς. That does not mean that νοῦς requires a soul in order to exist, but merely that all things possessing or receiving it must be souls. This leaves open the possibility that νοῦς might exist in itself, apart from souls.19 If we were to say that the Demiurge possesses νοῦς, then we would have to follow Cherniss in concluding that the Demiurge is a soul. However, if instead we were somehow able to establish that the Demiurge is νοῦς, i.e. νοῦς in itself, the very principle of νοῦς in all other things, then there would be no need to conclude that the Demiurge is a soul at all. I do not wish to stake out a

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17 I am grateful to Menn for compiling this list. Menn’s list also includes Sophist 239a, which I have omitted here, due to the fact that it does not make the claim in a straightforward way. Menn, 11.

18 This is my own translation. In Plato’s Complete Works, Dorothea Frede renders this sentence as “But there could be no wisdom and reason without a soul.” But her translation makes the passage seem to support Cherniss more than it really does. In the Greek, the passage does not provide a condition for the existence of wisdom and reason, but only for the coming to be of these things, i.e. their instantiation in a particular object. Σοφία μήν καὶ νοῦς ἄνευ ψυχῆς οὐκ ἄν ποτε γενοῖσθην.

position on the precise relation between the Demiurge and νοῦς, but only to show that the passages cited by Cherniss need not commit us to identifying the Demiurge as a soul.

Furthermore, it is difficult to see how the Demiurge could be a soul, given the account at *Timaeus* 34b of how the Demiurge himself made the soul of the cosmos.\(^{20}\) He made it by mixing together Being, the Same and the Different. This establishes that soul is the sort of thing that must be concocted out of more fundamental stuff. And since the Demiurge is a first principle, he cannot be concocted out of anything more fundamental. Therefore, he cannot be a soul.

But my denial that the Demiurge is a soul leads to another difficulty. The Demiurge was introduced as the cause of the cosmos. But in *Phaedrus* and *Laws* X, Plato appears to claim that all causes are souls:

> Every soul is immortal. That is because whatever is always in motion is immortal, while what moves, and is moved by, something else stops living when it stops moving. So it is only what moves itself that never desists from motion, since it does not leave off being itself. In fact, this self-mover is also the source and spring of motion in everything else that moves. (*Phaedrus* 245c)

Haven’t we got ourselves a satisfactory proof that soul is identical with the original source of the generation and motion of all past, present and future things and their contraries? After all, it has been shown to be the cause of all change and motion in everything. (*Laws* X 896a)

The *Phaedrus* tells us that soul is the “source and spring” of all motion, and *Laws* X tells us that soul is the “cause of all change and motion.” So how can there be any cause which is not a soul?

It seems that the Demiurge must be a soul if he is to be any sort of cause at all.

However, H. J. Easterling has explained how these two passages can be reconciled with a non-soul cause in the *Timaeus*. He first notes that “it is an over-simplification to suppose that the cause of an event can be narrowed down to a single agent or instrument…” Most often, when we identify the cause of an event, we do so with the knowledge that many other factors also played a role and were necessary for the event to occur as it did. In a sense, these other factors are causes too. In the *Timaeus*, Plato calls such factors *συναίτια*, “auxiliary causes” (46c-d). So for Plato, the primary cause of an event need not be the only cause.

Therefore, when *Phaedrus* and *Laws* X tell us that the cause of any motion is a soul, this does not mean that a soul is the *only* cause. Plato tells us that all motions are caused by souls, not that all causes are souls. For any particular motion, we must say that it was caused by a soul. But we might also be able to find additional causes which are not souls. If Easterling is right, then the Demiurge need not be a soul in order to be a cause. As long as each of his effects is caused not only by him, but also by some soul, there will be no problem.

But still, this is not entirely satisfying. We should not like to think that the Demiurge is powerless on his own, and can only cause his effects in concert with a soul. Here again, Easterling has found an elegant solution. He points to the “disorderly motion” of the pre-cosmic chaos as an example of motion that was not caused by any soul. This motion is described as pre-existing the creation of soul by the Demiurge, and pre-existing any of the Demiurge’s ordering activities. So according to the narrative, this motion occurred apart from soul and therefore soul

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21 Easterling’s concern is different from mine. He is focused on the *Timaeus*’ “disorderly motion,” which is not caused by any soul. He attempts to reconcile this with the claim in *Phaedrus* and *Laws* X that soul is the cause of all motion. However, despite our different goals, Easterling’s elegant solution to the problem is useful for my purposes as well. H. J. Easterling, “Causation in the *Timaeus* and *Laws* X,” *Eranos* 65 (1967), 25-38.

22 Ibid., 34.
was not required for this motion. But “once ψυχή is created that state of affairs comes to an end; the disorder is turned into a cosmos and ψυχή takes over.”

If Easterling is right, then the full power of the Demiurge as a cause can be maintained, even though he is not a soul. We can say that he has causal power prior to soul, but now that he has created soul, he always causes in concert with it. So we do not contradict the texts if we hold that the Demiurge is an active cause, but not a soul.

But if the Demiurge is not a soul, then what is he? Like Cherniss, Kevin Doherty identifies the Demiurge with an already familiar Platonic principle, the form of the Good. He attempts to demonstrate this on the basis of certain attributes shared by the Demiurge and the Good. The clearest of these is “an effusive goodness.” Just as the Republic tells us that the form of the Good is the “cause of all that is correct and beautiful in anything” (517b), the Timaeus says of the Demiurge that “He was good” (29e) and that he “wanted everything to be good and nothing to be bad so far as that was possible” (30a). And going a bit further in the text, we read, “Now it wasn’t permitted (nor is it now) that one who is supremely good should do anything but what is best” (30a-b). So both the Good and the Demiurge are good in themselves and impart their goodness to the cosmos. And just as the Timaeus says that “of

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23 Ibid., 38.

24 This need not imply that Plato takes the creation of soul to be a historical event, or that there was ever a state of affairs that preceded soul. But the precedence of the Demiurge to soul in the narrative mythic time of the Timaeus does suggest that the Demiurge is metaphysically prior to soul and that his causal power is metaphysically prior to the causal power of soul.


causes the craftsman is most excellent” (29a), the Republic describes the Good as “the best among the things that are” (532c). So both are described as having superlative goodness.

But this is scant evidence and Doherty’s interpretation overlooks an important dissimilarity between the Demiurge and the Good. They do not have the same relation to the forms. In the Republic, Plato says that “not only do the objects of knowledge owe their being known to the good, but their being is also due to it…” (509b). The form of the Good is, in some sense, the source of being for all of the other forms. On the other hand, in the Timaeus, the Demiurge is not the source of the forms. They are the model he uses for all of his making, and therefore not one of the things he has made.

So if the Demiurge is neither a soul nor the form of the Good, then what is he? Daniel Anderson and Joseph Brent identify the Demiurge with yet another familiar Platonic principle,

27 Ibid., 522. In addition to the two I’ve presented, Doherty draws a few other parallels, but they are far less compelling and less supported by textual evidence.

28 Cherniss uses a similar line of argument to show that the Demiurge should not be identified with the form of the Good. He argues that they do not have the same relationship to νοῦς. According to his interpretation of the Timaeus, “for Plato νοῦς is either god or an essential characteristic of whatever deity may be….” He then cites Republic 508a-509b and 517b-c as evidence that in that dialogue, “the idea of good is declared to be not νοῦς but the cause of νοῦς and so it cannot be god….” Cherniss, 605-606.

29 It might seem that this is contradicted by Republic 597b, where we are told that the form of Bed was made by a god. But the same passage makes it clear that this god is not a demiurge. “Surely no craftsman makes the form itself.” (596b) “So, if someone were to say that the work of a carpenter or any other craftsman is completely that which is, wouldn’t he risk saying what is untrue?” (597a – emphasis mine). In fact, the concern of this passage is to contrast between the making of god, who only makes the form, and the making of demiurges, who make things in their plurality. So the god mentioned here is not the cosmic Demiurge, and we should not read the passage as saying that the Demiurge made the forms.

30 It is true that a craftsman will often make a “model” of his project before beginning the project itself, as when an architect first makes a small model of a house that he will build later. But the English word model has more than one meaning. The architect’s model is merely a representation of his plan for the project, and not the standard to which he will look as he builds the house. On the other hand, the Demiurge’s model is not a mere representation of his plan for the cosmos, but rather the very standard to which he will look as the cosmos is ordered. To suggest that the Demiurge is the source of his model is to render the model unnecessary, since it then becomes a mere representation, rather than the standard to which the Demiurge looks.
They claim that, according to the *Timaeus*, the cosmos is self-ordering, and is its own Demiurge. One of their principal arguments is based on 33c, which says of the cosmos that

it needed no eyes, since there was nothing visible left outside it; nor did it need ears, since there was nothing audible there, either. There was no air enveloping it that it might need for breathing, nor did it need any organ by which to take in food or, again, expel it when it had been digested. For since there wasn’t anything else, there would be nothing to leave it or come to it from anywhere.

They take this to mean that there can be nothing outside of the cosmos, including the Demiurge. And since the Demiurge cannot be outside the cosmos, they argue that he is the cosmos itself.

However, this argument is premised on the dubious assumption that the Demiurge has a spatial location, either inside or outside the cosmos. Anderson and Brent take 33c to preclude the Demiurge from being outside the cosmos and then conclude that he must be within. But there is an obvious third possibility, namely that the Demiurge is not spatially located at all, that he is neither inside nor outside of the cosmos. In fact, given his immateriality, it is hard to see what it would mean for him to be located anywhere. So simply showing that the Demiurge cannot be exterior to the cosmos does not require us to conclude that he is within it, much less coextensive with it. Therefore, there is no reason to think that he is the cosmos itself.

So the Demiurge is not a soul, not the form of the Good and not the cosmos itself. Yet it still seems most likely that, as Cherniss argues, he is identical to some familiar Platonic


32 Ibid., 3. I have simplified their argument a little. The actual structure of their argument is first to show that 33c does not allow anything to be outside the cosmos, then to argue that this precludes the Demiurge’s model from being outside the cosmos. Finally, they identify the Demiurge with the model, which then precludes him from being outside the cosmos as well.
principle. And I will now argue that he is identical to his model, the forms considered as a single networked whole.

### iii) The Demiurge is the Model

In antiquity, many Neo-Platonists identified the Demiurge with his model. Commenting on *Timaeus* 28a, where the Demiurge looks to the changeless model, Plotinus, who refers to the Demiurge as *Intellect* (*Nous*), writes,

> Does he, then, say that the Forms [*εἴδη*] exist already before Intellect, and that Intellect thinks them when they (already) exist? …there is nothing in the statement against both being one, but distinguished by thought, though only in the sense that one is intelligible object, the other intelligent subject. *(Ennead III.9.1)*

He takes the forms and the Demiurge to be one, separable only in thought. If we think of them as subject, they are the Demiurge, but as object, they are forms.

Proclus also took the Demiurge and his model to be one. In his *Commentary on the Timaeus*, he notes that “The words of Plato also appear at one time to make the paradigm different from, and at another the same with the Demiurgus” (323). He then examines examples of Plato speaking each way in the *Timaeus* and determines that Plato speaks definitively at 29e-30a, when he writes,

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Now why did he who framed this whole universe of becoming frame it? Let us state the reason why: He was good, and one who is good can never become jealous of anything. And so, being free of jealousy, he wanted everything to become as much like himself as was possible.

Proclus takes the claim that the Demiurge “wanted everything to be as much like himself as was possible” to mean that the Demiurge used himself as the model for the cosmos:

…here, the sameness [ταυτότητα] of the Demiurge with the paradigm appears to be manifest…. For the ideas, or four monads of ideas, prior to the fabrication of things subsist intelligibly [νοητῶς]; but the order of the forms proceeds into the Demiurgus; and the whole number of ideas is one of the monads which he contains. (p. 324)

By itself, 29e-30a is not conclusive evidence that the Demiurge and his model are one. Its meaning depends upon how we understand the significance of the claim that the Demiurge was good. One way of interpreting it would be to say that the description of the Demiurge as good only serves to explain why he was without jealousy. And the fact that he was without jealousy then explains why he used himself as the model for the cosmos. But another way to interpret the claim that the Demiurge was good is to take it as not only an explanation of why he was without jealousy, but also as a clarification of the exact sense in which the Demiurge wanted the cosmos to be like himself. Because he was good, he wanted the cosmos to be good. According to this interpretation, the text does not imply that the Demiurge used himself as a model, but simply that he wanted to make the cosmos good, as he is good. Proclus is not alone in taking the passage to say that the Demiurge used himself as a model,35 but the ambiguity of the passage means that identifying the Demiurge and his model will require further evidence.

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35 For examples, see Gerson, *Aristotle and Other Platonists*, 215, Anderson and Brent, 1 and Benitez, 128.
Auguste Diès notes that there are several parallels between the descriptions of the Demiurge and his model.\textsuperscript{36} For example, the Demiurge is said to have superlative goodness at 30a-b, and the same is said of the model at 30d:

Now it wasn’t permitted (nor is it now) that one who is supremely good should do anything but what is best. \textsuperscript{30a-b}

Since the god wanted nothing more than to make the world like the best of the intelligible things, complete in every way, he made it a single visible living thing, which contains within itself all the living things whose nature it is to share its kind. \textsuperscript{30d}

Further, both the Demiurge and his model are described as eternal:

Now surely it’s clear to all that it was the eternal model he looked at…. \textsuperscript{29a}

…the soul came to be as the most excellent of all the things begotten by him who is himself most excellent of all that is intelligible and eternal. \textsuperscript{36e-37a}

Franco Ferrari notes another parallel, in that the Demiurge and his model are both called father:\textsuperscript{37}

Now to find the maker and father of this universe… is hard enough…. \textsuperscript{28c}

…we need to keep in mind three types of things: that which comes to be, that in which it comes to be, and that after which the thing coming to be is modeled, and which is the source of its coming to be. It is in fact appropriate to compare the receiving thing to a mother, the source to a father, and the nature between them to their offspring. \textsuperscript{50c-d}

So both the Demiurge and his model are superlative in their goodness, eternal and called the father of the cosmos.

The last of these parallels is the most important. It is striking that both the Demiurge and the model have superlative goodness and eternality. But these commonalities alone would not preclude the Demiurge and model from being two distinct things. However, the fact that both are called father immediately suggests that they are one and the same. Obviously, Plato is using

\textsuperscript{36} Diès, 549-50.
father metaphorically, but we should not think that he chose this metaphor carelessly. He means for us to associate significant aspects of fatherhood with the Demiurge and with the model. And one of the essential properties of an earthly father is his uniqueness. We might call many people judge, or general or aunt. But for each living thing, there is only one father. At 32c, Timaeus tells us that the Demiurge “begat [γεννάω]” the cosmos, and in any act of begetting, the father is uniquely the father. Since the Demiurge and his model are each called the father of the cosmos, it is hard to see how they could be distinct from each other.

Ferrari draws a further argument out of 50c-d (quoted above). In that passage, Timaeus only identifies the Receptacle and the model as the parent principles of the cosmos.

<table>
<thead>
<tr>
<th>Mother</th>
<th>Receptacle</th>
<th>the receiving thing / that in which it comes to be</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td>Model</td>
<td>the source / that after which the thing coming to be is modeled, and which is the source of its coming to be</td>
</tr>
<tr>
<td>Offspring</td>
<td>Cosmos</td>
<td>the nature between them / that which comes to be</td>
</tr>
</tbody>
</table>

The Demiurge is conspicuously absent from this arrangement, suggesting that at this point in the text, the role of the Demiurge is being carried out by something else. And since the Demiurge has been called father, as the model is here, it seems that the model has taken his role. Again, this suggests that the Demiurge and his model are one.

Furthermore, it seems to me that calling the Demiurge a father at all is rather significant. The text could have described him simply as the craftsman, god and maker. But Plato also chose

37 Because Ferrari’s article is only available in Italian, a language which I do not read, my comments here are based on a summary in Johansen, 77. Ferrari’s own article is included in the same volume as Johansen’s under the title, “Causa Paradigmatica e Causa Efficiente: Il Ruolo della Idee nel Timeo,” 83-96.

38 See Johansen’s English summary of Ferrari’s arguments, 77.
to call him a father. Fathers do not merely produce offspring as products, foreign to themselves. Instead, they *beget* offspring who resemble themselves. Each offspring is, in a way, the image of his or her father. And Plato not only calls the Demiurge a father, but uses the verb γεννάω [beget] 13 times to describe the ordering of the cosmos, first at 32c. So if the Demiurge stands in relation to the cosmos as a father stands in relation to his begotten offspring, we ought to expect the cosmos to resemble the Demiurge. And this suggests that the cosmos is modeled after the Demiurge himself.

I would next like to expand on a point I made previously in this section. In earlier dialogues, Plato was trying to explain the coming to be of individual things, and so he only pointed to individual forms. These forms served as models for their instances, but as I argued in chapter two, they also served as makers. So for individual things, individual forms are both models and makers in one. But in the *Timaeus*, Plato is interested in discussing the coming to be of the cosmos as a whole. And so rather than talking about individual forms serving as models, he talks about a singular model constituted by all of the forms together. But if individual forms are both models and makers, this suggests that the forms, considered as a whole, would be both models and makers as well. If this is so, then the Demiurge’s role as maker, if he were something other than the forms, would not add anything to what the forms themselves can do.

And this is good reason to deny that the Demiurge is anything other than the forms. Plato has an obvious preference for parsimony when it comes to αρχαί. He explains all instances of beauty with the single form of Beauty, all instances of equality with the Equal, all instances of goodness with the Good, etc.\(^\text{39}\) In the *Republic*, he famously argues that the best city is the

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\(^{39}\) It might seem that the theory of forms does not give us parsimony, since it adds additional entities to our understanding of reality. And that is certainly true. But the theory does give us parsimony with respect to αρχαί,
monarchy or aristocracy in which one or few philosopher kings rule over the many. Likewise, the best soul is the one in which the calculating part rules over the others. Even with regard to the forms, he holds that the form of the Good in some way stands above all the others, just as the sun stands above all visible things. Wherever there is order, Plato explains it with as few principles as possible. If a Demiurge who is extrinsic to the forms would be superfluous, it is unlikely that Plato intended to talk about a Demiurge who is extrinsic to the forms. More likely, the Demiurge is not extrinsic to the forms, but rather they are one and the same.

This concludes my evidence from the standard text of the *Timaeus*. But Diès draws attention to a variant Greek manuscript which says at 92c that the cosmos is “a sensible [αἰσθητός] God, an image of the Maker[ποιητοῦ].” Diès acknowledges that this manuscript is most likely in error. (The standard text, which has νοητοῦ rather than ποιητοῦ, provides an elegant opposition between the intelligible and the sensible, and is far more likely to have been the original.) Nevertheless, Diès suggests that this variant is an “intelligent error.” However, since it is an error, the view that the Demiurge and his model are one “could, in any case, only be justified logically.”

If, as I have argued, the Demiurge and his model are one, then his role as maker and orderer can be ascribed to the forms themselves. And this would make the forms the agent cause of the cosmos as a whole. Perhaps this is why we are told at 28a that an eternal model possesses power [δύναμις]. “So whenever the craftsman looks at what is always changeless and, using a

since it unifies each type of thing under a single first principle, rather than allowing each individual thing to be a principle unto itself.

40 This translation is my own. The manuscript variation is also noted in Burnet’s OCT.

41 “faute intelligente…. pouvait, en tout cas, se justifier au seul point de vue logique.” Diès, 550.
thing of that kind as his model, reproduces its form and δύναμιν, then, of necessity, all that he so completes is beautiful.” An eternal model is not merely a model, but has power of its own.

2. Being and Coming to Be

I would now like to examine a further piece of evidence that the forms are active causes in the Timaeus. The dialogue distinguishes two ontological classes, the eternal things which are, and the temporal things which come to be. Whereas forms belong to the class of things which are, particulars belong to the class of things which come to be. In this section, I will examine the relationship between these two classes of things and argue that particulars are completely dependent on forms in such a way as to require that particulars are produced by the forms. And since the forms produce particulars, we can say that forms are active causes.

The myth in the Timaeus begins with these words at 27d-28a:

…we must begin by making the following distinction: What is that which always is and has no becoming, and what is that which becomes but never is? The former is grasped by understanding, which involves a reasoned account. It is unchanging. The latter is grasped by opinion, which involves unreasoning sense perception. It comes to be and passes away, but never really is.

Only a little later, it is made clear that particulars, those things which are perceptible, belong to the class of things that come to be:

This is the sort of question that one should begin with in inquiring into any subject. Has it always existed? Was there no origin from which it came to be? Or did it come to be and take its start from some origin? It has come to be. For it is both visible and tangible and it has a body – and all things of that kind are perceptible. As such, they are things that come to be, things that are begotten. (Timaeus 28c)

Of course, the implication, then, is that the class of beings consists of those things which are imperceptible, i.e. the forms.
This recalls the ontology developed in the discussion on the previous day, in the *Republic*. In the latter half of *Republic* Book V, knowledge was distinguished from opinion, with each grasping a different sort of object. Knowledge was said to grasp things that are, whereas opinion was said to grasp things that lie between being and non-being, i.e. things that come to be:

Now, we said that, if something could be shown, as it were, to be and not to be at the same time, it would be intermediate between what purely is and what in every way is not…. And now the thing we call opinion has emerged as being intermediate between them? (478d)

This means that, for Plato, coming to be (γένεσις) is not simply an event or process, but indicative of a distinct ontological status. Each thing belongs either to the class of being or to the class of becoming, but nothing belongs to both.  

This same ontological dichotomy appears in a number of Plato’s other works, for example *Theatetus* 152d-e and 157b, *Philebus* 54a-c, *Protagoras* 340c-d, and *Phaedo* 78b-79a. In fact, its use in the *Phaedo* explains some of that dialogue’s peculiarities. Socrates discusses aetiology in the *Phaedo* as a part of his argument that the soul not only can, but must, survive death. But he says that this will require an investigation of “the cause of coming to be and of destruction.”  

Why isn’t it enough to investigate the cause of destruction? Why is the cause of coming to be relevant at all? And why does Socrates spend the bulk of the passage talking about how things come to be, only returning to the question of how they are destroyed near the end?

The answer is that coming to be is not simply an event, but also indicative of an ontological status.

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42 The one exception is soul. “The components from which he made the soul and the way in which he made it were as follows: In between the Being that is indivisible and always changeless, and the one that is divisible and comes to be in the corporeal realm, he mixed a third, intermediate form of being, derived from the other two.” *Timaeus* 35a.

43 My translation of 96a.
status. And only things that have this status are capable of being destroyed, since things with the alternative status are eternal. So by determining the cause of coming to be, i.e. by determining why some things have this status, Socrates will also come to know why they are able to be destroyed. In fact, coming to be and destruction are so completely entangled with each other that Socrates does not even entertain the possibility that they might have separate causes. Instead, he sets out to find the single cause of both.

Of course, the materialists criticized in the *Phaedo* did not make the ontological distinction between being and coming to be. They believed that particulars both are and come to be, so that rather than seeking the one cause of coming to be and destruction, they sought “the causes of each thing, by which each comes to be, by which it is destroyed *and by which it is*” (96a-b).\(^\text{45}\) The materialists not only ascribe being to particulars, but also require a plurality of causes, whereas Socrates claims at the beginning of the passage that coming to be and destruction have a single cause. After Socrates rejects the approach of the materialists and turns to forms as causes, he tells us why particulars come to be and why they are destroyed, but never even attempts to explain why they are. Most likely this is because, after discovering the forms, Socrates no longer ascribed the ontological status of being to particulars. Being is reserved for the forms, while particulars belong to the class of things that come to be.

At first, this sounds like a very strange idea. What is this ontological status of “coming to be?” What can it mean for a thing to lie between being and non-being? And in what way do

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\(^{44}\) It is clear that Plato cannot be thinking of coming to be simply as an event here. If he meant to address the event of coming into being, this would be the opposite of the event of destruction. And by positing a single cause of both at 96a, he would be violating his own rule that a single cause cannot produce two opposite effects.

\(^{45}\) My translation and my italics. This same trio of coming to be, being destroyed, and being occurs twice more in the discussion of the materialists, at 97b and 97c-d.
particulars have a lesser ontology than the forms? There are two common interpretations. According to the first, Plato is simply saying that some things (namely the forms) are really what they seem to be, whereas particulars are not really what they seem to be, at least not fully. Plato is distinguishing two degrees of reality, two degrees of something really being what it seems to be. But according to the second interpretation, Plato is distinguishing two degrees of existence itself. He is not simply claiming that some things are more what they seem to be, but rather that some things are more than others, that there are degrees of existence itself.

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The first of these two interpretations is by far more commonly held. It has been notably defended by Crombie, Fine and Vlastos.46 Crombie explains the status of particulars in Plato as follows:

He certainly denied to physical things the status of onta, but this as we have seen does not mean that he denied their real existence…. They do not lack existence tout court, they lack existence-as-beautiful-things/heavy-things or whatever it may be.47

Because the form of Beauty is beautiful in every respect, we may say that it is really beautiful. But beautiful particulars (flowers, sunsets, etc.) “appear to be beautiful in a way and also to be ugly in a way” (Republic 479b).48 So their beauty is not complete, not fully real. Thus there are two degrees of reality when it comes to beauty, the full reality of Beauty itself, and the partial reality of the beauty in particulars. The same would apply to the other forms as well. But the

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47 Crombie, v.2, 68.

48 Vlastos has identified four ways in which the form of Beauty excels the many beautiful things, and is therefore “more real.” It is not “(1) beautiful in one respect, but not in another, nor yet (2) beautiful at one time, but not at another, nor yet (3) beautiful in relation to some things, ugly in relation to others, not (4) beautiful here, ugly elsewhere, being beautiful for some, ugly for others.” Vlastos, “Degrees of Reality in Plato,” 66-7.
lesser reality in particulars does not cast doubt on their very existence. Even if a flower is not “really” beautiful, it is still something. It still exists. Or to use Gail Fine’s example of the white paper on which she is writing, “The paper on which I am now writing is not green, nonetheless, it exists.”49

But according to the other interpretation, which distinguishes degrees of existence, Plato does mean to cast doubt on the very existence of the flower and the paper, not simply their existence qua flower and paper, but their existence itself. According to this interpretation, some things exist to a greater degree than others. The forms have the fullness of existence and are true beings. But the very existence of particular things has a lesser degree, and therefore they cannot properly be called beings. This is why Plato places them between that which is and that which is not. And this is why he distinguishes their ontological status from full being, by calling it coming to be.

This interpretation was common in ancient times and has been defended in the last few decades by Xiaomei Yang and Richard Mohr.50 Responding to Gail Fine’s claim that even though her paper is not green, it still exists, Yang offers the following consideration concerning a paper that actually is green,

If Plato believes that a green paper is not really green because it is not the green itself, it is plausible to assume that he also believes that the green paper does not fully exist because it is neither the green itself nor the paper itself.51

Yang raises an interesting problem for the degrees of reality interpretation. If a green paper is not really green, since it is not the Green itself, then what exactly is it that exists on the desk? If

49 Fine, “Knowledge and Belief in Republic V,” 134.

there is a form of Paper, then what is on the desk isn’t really paper, but only something that is papery. And if there is a form of Solidity, then what is on the desk cannot really be solid, but solid-like. And if for all other intelligible properties sitting on the desk, we can plausibly postulate forms, in comparison to which the thing on the desk is not really what it appears to be, then what is left to exist on the desk? If we strip away all of the forms, does anything remain? If not, then the paper does not really exist in the fullest sense of the word. Whatever share it has in existence, it owes to the forms that make it green, papery, solid, etc.

For our purposes, it is not necessary to determine whether Plato is distinguishing degrees of reality or degrees of existence. So I will not insist on either of these interpretations. But in his own comments on this strange status of coming to be, Plato tells us something which will be helpful in showing that forms are active causes. His most explicit explanation of how something can lie between being and non-being is found in the Sophist at 240a-c, where we are told that an image [εἰδωλόν] has this status. Theaetetus and the Eleatic Visitor are discussing what an image is in relation to the original of which it is an image:

Visitor: You’re saying it’s another true thing like it? Or what do you mean by like it?

Theaetetus: Not that it’s true at all, but that it resembles the true thing.

Visitor: Meaning by true [ἀληθινόν], really being [ὄντως ὄν]?

Theaetetus: Yes. (240b)

The Visitor’s final line equates true with really being. And Theaetetus tells us that images lack truth, which must necessarily mean that somehow they lack being. But in what sense do images lack being? Does this mean that they aren’t real at all? Theaetetus responds to this question a few lines later:

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51 Yang, 28.
Theaetetus: But it is, in a way.

Visitor: But not truly, you say.

Theaetetus: No, except that it really is a likeness.

Visitor: So it’s not really what is, but it really is what we call a likeness?

Theaetetus: Maybe that which is not is woven together with that which is in some way like that—it’s quite bizarre. (240b-c)

Theaetetus locates images between that which is and that which is not, i.e. between being and non-being. On the one hand, they are not really what they seem to be, and not wholly real. But on the other hand, they are not wholly unreal either, since they really are images. So, for example, consider a drawing of a pineapple. It falls short of being a real pineapple in many ways. It is two-dimensional, not a fruit, and it is unlikely that anyone could make from it a delicious upside-down cake. But still, it is not nothing. There is something there that could be held, framed or magnetically hung on a refrigerator. It falls far short of being a really real pineapple, but it rises far above being nothing. Its status is somewhere between the really real and nothingness, i.e. between being and non-being.

Once we understand the intermediate ontological status of images, it is easier to understand the distinction between being and coming to be in the Republic and Timaeus. In fact, coming to be is associated with images in both of these dialogues. In Book V of the Republic, we were told that opinion grasps coming to be, whereas knowledge grasps being. And at the end of Book VI, Socrates says that “as the opinable is to the knowable, so the likeness is to the thing that it is like” (510a). It follows from this that the things that come to be are likenesses of the things that are. In other words, they are images.

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52 This same association of knowledge with being, and opinion with coming to be, appears in the Timaeus at 27d-28a and 51b-e.
This relationship becomes much clearer at the beginning of Book VII. In the Allegory of the Cave, the cave is analogous to the realm of coming to be, of which it is only possible to have opinion. But the world outside the cave is analogous to the realm of being, where true knowledge can be obtained. The cave is full of images. There are the statues of men and animals as well as the shadows they cast. And even the fire in the cave is a likeness of the sun. So in the Republic, the realm of coming to be is a realm of images.

This association of coming to be and image is continued as a central theme in the Timaeus. We have already noted that the cosmos (which comes to be) was made in the likeness of an eternal model. But even before Timaeus presents his cosmogony, the theme is present. The dialogue begins with Socrates describing the ideal city developed in the previous day’s discussion. Socrates then says at 19b,

> My feelings are like those of a man who gazes upon magnificent looking animals, whether they’re animals in a painting or even actually alive but standing still, and who then finds himself longing to look at them in motion or engaged in some struggle or conflict that seems to show off their distinctive physical qualities. I felt the same thing about the city we’ve described.

This ideal city, because it is an idea, belongs to the class of eternal things, things that are. But Socrates longs to see it in motion, i.e. as temporal and coming to be. If this could be accomplished, then the city in motion would be an image of the ideal city, in the same way that a living unicorn, griffin or satyr would be an image of the paintings of such animals.\(^{53}\) It would

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\(^{53}\) Plato is struggling with his imagery here. The ontology of the Republic and Timaeus requires that the city in motion must be an image of the ideal city, and not the other way around. So by analogy, the animals in motion must be images of the animals in the painting. This is counter-intuitive, since the painting is quite obviously an image itself, and we would be more inclined to think of the painting as a likeness of the animal in motion. But the salient feature of the animals in the paintings is not that they are images, but that like the ideal city, they are changeless. This is why “actually alive but standing still” animals are placed on par with the painted ones. The passage should be read in parallel with the later claim that the cosmos is modeled after an intelligible (and therefore changeless) Living Thing (30c). Though it is changeless, it lives. In order to rescue Plato’s analogy here, I have used mythological animals as examples, since our depictions of these animals are not images of any animals in motion. However, if some powerful magician or God brought these animals to life, then the animals in motion would be images of our depictions.
come to be as an image of that which really is, fulfilling what Socrates had said at 500d in the
*Republic*, “the city will never find happiness until its outline is sketched by painters who use the
divine model.”

The notion that particulars are images of forms is further emphasized in the *Timaeus* at
52a-b. Timaeus has just finished arguing that there really are forms (51b-e), and he then
summarizes the distinction between forms and particulars as follows:

…that which keeps its own form unchangingly, which has not been brought into being and is not
destroyed, which neither receives into itself anything else from anywhere else, nor itself enters
into anything else anywhere, is one thing…. The second thing is that which shares the other’s
name and resembles it.

Particulars are said to resemble the forms, to be like [ὅμοιος] them. To use Timaeus’ example, a
particular fire would be a resemblance of Fire itself.

So in at least a few dialogues, Plato conceives of things that come to be (particulars) as
images of that which really is (the forms). But what sort of images are they? The answer to that
question will provide the next step in my argument that forms are active causes.

Edward N. Lee has suggested that images generally come in two varieties, substantial and
insubstantial.54 Substantial images have an “independent physical identity of their own.” They
can survive the absence or destruction of their originals. For example, the *Mona Lisa* continues
to hang in the *Louvre*, even though the woman who posed for the painting has long been dead.
In addition to paintings, Lee includes statues, photographs and footprints among substantial
images. On the other hand, insubstantial images “wholly derive their being from their original
and from the medium in which they appear.” If I cease to exist, then my shadow will cease to

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exist as well. It cannot survive my destruction. In the same way, my reflection in a mirror is completely dependent upon me, and cannot appear apart from me.

Lee argues that, in the *Timaeus*, Plato’s presentation of the Receptacle shows that particulars are *insubstantial* images of the forms. The Receptacle is first introduced at 48e-49a:

> Then we distinguished two kinds… one was proposed as a model, intelligible and always changeless, a second as an imitation of the model, something that possesses becoming and is visible. We did not distinguish a third kind at the time, because we thought that we could make do with the two of them. Now, however, it appears that our account compels us to attempt to illuminate in words a kind that is difficult and vague. What must we suppose it to do and to be? This above all: it is a receptacle of all becoming – its wetnurse, as it were.

Here again, we see that the visible has the status of coming to be and that it is an imitation of the eternal forms. But the forms and their visible images do not provide a sufficient account of the cosmos. The Receptacle is introduced to close the gap in this account, to be a third thing in addition to forms and images.

Lee compares the role of the Receptacle to the role of a mirror in a magician’s trick. In his trick, the magician uses a mirror to make it appear that an object is in one place when it is really in another. When one points to where the object appears to be, one is only pointing at the mirror. The object is not really there; only an image of it is. But one is still seeing the image of a real object reflected in that place. And the image is insubstantial, since it cannot appear in the absence of the original. All of this becomes clear to the audience if the magician reveals the mirror.

In telling us about the Receptacle, Lee claims that Plato is revealing the mirror in which the images of forms appear. When we see a particular, we are seeing an insubstantial image of a form. When we point to the object, we are really only pointing at the Receptacle. The form is

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55 Ibid., 355-6.
not really there; only its image is. Nevertheless, the particular before us gives us a glimpse of the form itself. The particular, however, is only an insubstantial image and is completely dependent upon the form which it images.

Lee provides two pieces of evidence to support this interpretation. First, it makes sense out of the rather obscure passage at 49e-50a. Concerning particulars, Timaeus warns us

…never to speak of anything else as “this,” but always as “what is such” …. So fire – and generally everything that has becoming – it is safest to call “what is altogether such.” But that in which they each appear to keep coming into being and from which they subsequently pass out of being, that’s the only thing to refer to by means of the expressions “that” and “this.”

Plato says that when we point to a particular fire, we cannot safely say that this is fire. We can only safely say that this is the Receptacle, or that the Receptacle is altogether fiery here. Why should that be? The answer is that once we know the magician is using a mirror, we know that we can’t safely point straight ahead and say, “this is a rabbit.” It is only safe to say that the mirror is there, or that the mirror displays a rabbit image there. In the same way, once we know of the Receptacle, when a fire appears before us, we can no longer safely say, “this is fire.” Instead, we can only say that this is the Receptacle, or that the Receptacle is fiery here.

Secondly, Lee points to 52c, where Timaeus speaks more directly about the nature of images:

Since that for which an image has come to be is not at all intrinsic to the image, which is invariably borne along to picture something else, it stands to reason that the image should therefore come to be in something else, somehow clinging to being [οὐσίας ἀμοστέρως ἀντιπάλην], or else be nothing at all.

Lee believes that he has actually provided three good pieces of evidence. However, one of his three is the passage in which Timaeus compares physical things to images cast in gold (50a-b). Lee does not draw any attention to the problematic fact that golden images are substantial rather than insubstantial. His focus seems to be on Timaeus’ claim that, when pointing to a golden triangle, it is safer to say, “this is gold,” than to say, “this is a triangle.” This would again be similar to the magician with his mirror. Because his evidence here is problematic, I have left it out of the main text. However, I do not believe that the substantial nature of golden images undermines Lee’s general claim at all. Plato is trying to explain something here that he thinks is “difficult to describe [δύσφραστον]” (50c), and none of his talk about it is perfect. But if we focus on his literal statements concerning the images, rather than his metaphors, they clearly point toward physical things being insubstantial, rather than substantial images.
Lee interprets this to mean that the image is what it is because of its relationship to the form. *What it is* is not intrinsic to itself, but is rather held by “clinging to being.” And as we have already seen, Plato typically identifies being with form. So it is the continued relationship with the form that allows the image to be what it is. If that relationship ends, the image is “nothing at all,” and only the Receptacle remains.

Lee’s comparison of particulars to reflections in mirrors also receives some support from the *Republic*. In Book X, the discussion has turned to how a craftsman (demiurge), using forms as models, could make all of the many things in the world:

Don’t you see that there is a way in which you yourself could make all of them?

What way is that?

It isn’t hard: You could do it quickly and in lots of places, especially if you were willing to carry a mirror with you, for that’s the quickest way of all. With it you can quickly make the sun, the things in the heavens, the earth, yourself, the other animals, manufactured items, plants, and everything else mentioned just now. (596d)

The things created by such a craftsman are then said to fall short of that which is, since he does not make the form itself, but only a likeness of the form:

Now, if he doesn’t make the being of a bed, he isn’t making that which is, but something which is like that which is, but is not it. So, if someone were to say that the work of a carpenter or any other craftsman is completely that which is, wouldn’t he risk saying what isn’t true? (597a)

Here, Plato tells us explicitly that demiurgic works fall short of that which is because such works are only likenesses. And the way in which they are likenesses is compared explicitly to mirror imaging. This means that the particulars produced by a demiurge are like reflections in mirrors; they are insubstantial images.

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57 Lee interprets “clinging to being” to mean “clinging to the form,” and I am inclined to agree with him. But there is some ambiguity in the text, since one might alternatively interpret it to mean that the image is clinging to the Receptacle. For this reason, 52c is weaker evidence for Lee’s interpretation than 49e-50a.
Insubstantial images are shaped by two factors. The first is the original that is imaged. For example, the reflection of a hyena is different from the reflection of a goat. But the second shaping factor is the medium in which the image is produced. The reflection of a hyena in still water will be a better image than the reflection of that same hyena in turbulent water. This is why Timaeus tells us that the cosmos has two parent principles: the model and the Receptacle, both of which contribute to the images produced.

Now as a medium, the Receptacle seems to be akin to turbulent water, since it brings with it a “straying cause,” the nature of which is “to set things adrift” (48a). The Receptacle can take on a variety of visible aspects, but because it is filled with powers that are neither similar nor evenly balanced, no part of it is in balance. It sways irregularly in every direction as it is shaken by those things, and being set in motion it in turn shakes them (52e).

And just as turbulent water interferes with the images that are cast into it, resulting in imperfect images, the Receptacle prevents the images it receives from being as perfect as they could otherwise be. Due to the turbulence of the Receptacle, the Demiurge meets with resistance as he attempts to bring things to perfection, instead only succeeding in making things “as perfect and excellent as possible” (53b). But the resistance comes from the Receptacle, not from the images themselves, since they are insubstantial.

Insubstantial images are powerless to resist their own instantiation. For example, a shadow of a cat cannot resist imaging the cat, and the reflection of a wolf cannot resist imaging the wolf. Any resistance would have to come from the medium in which the image is cast. Similarly, we cannot say that insubstantial images adopt models for themselves to image. The image does not exist until the original has cast it. When I stand before a mirror, I cast a
reflection, an insubstantial image. My reflection does not adopt me as its model. Rather, by standing before the mirror, I cast my reflection into the mirror, so I have causal priority over my reflection. I act on it, not the other way around. Similarly, when I cast a shadow, I have causal priority over my shadow. And in general, whenever an image is insubstantial, the original has causal priority.

Of course, this principle only holds for insubstantial images. With substantial images, it is quite possible for the image to have causal priority. For example, an Elvis impersonator is a substantial image of Elvis. (The impersonator does not require the continued presence of Elvis in order to be Elvis’ image. This is lucky for the impersonator, who otherwise would have been out of a job since 1977!) And it is the impersonator who adopts Elvis as his model and causes himself to become an image of Elvis. He strives to imitate Elvis, who is now completely inert, and by his own efforts, he takes on Elvis’ image. All of this is possible because the impersonator is a substantial image of Elvis. An insubstantial image could never have causal priority in this way.

So if particulars are insubstantial images of forms, then the forms have causal priority over particulars. Particulars do not turn to the forms as models; their ontology is simply too weak and too dependent for that to be the case. Instead, forms cause their images to be cast in

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58 Joan Kung has written an article which argues that it is wrong to liken the Receptacle to a mirror. J. Kung, “Why the Receptacle is not a Mirror,” Archiv für Geschichte der Philosophie 70 (1988). Her primary criticism is that, given Plato’s explanation of how vision and mirrors work at Timaeus 45b–46c, an object which casts its image into a mirror must be “an active causal agent” (p. 168). So if the Receptacle were truly like a mirror, this would imply that the forms are active causal agents as well. Kung finds this conclusion absurd. Obviously I disagree with her about the absurdity of the conclusion, but I am relying on the same inference that she is. If the Receptacle is like a mirror, then the forms must be active causal agents.

59 This same point is made in Burge, 9-10. Fine also denies that physical objects are actively striving to be like the forms. However, she does not base her denial on the ontological status of the physical objects. Fine, “Forms as Causes: Plato and Aristotle,” 100-1.
the Receptacle, and thereby produce physical objects as their images.\textsuperscript{60} And it is in this sense that they are active causes. Perhaps Cresswell says it best:

\begin{quote}
It is very natural, when thinking of the relationship between Forms and particulars, to say that Plato believed that to be $\varphi$ is to participate in (or to be) $\varphi$-ness. Such an analysis (or something like it) is, I think, justified if we are concerned with the problem of Plato’s theory of predication, but it does give the impression that the individual $x$ is $\varphi$ because it does something to (viz. participates in) $\varphi$-ness. The emphasis in our passage [the discussion of aetiology in the \textit{Phaedo}] is that $x$ is $\varphi$ because $\varphi$-ness does something to $x$….\textsuperscript{61}
\end{quote}

It is true that Plato occasionally speaks as though it were particulars that turn to the forms as models. For example, at \textit{Parmenides} 130e, speaking of how physical objects get their names, Parmenides says, “these other things, by getting a share [$\mu\epsilon\tau\alpha\lambda\mu\beta\alpha\nu\nu\tau\alpha$] of them [the forms], derive their names…” At \textit{Phaedo} 75a, Socrates says of equal things that “all these objects strive [$\omicron\rho\epsilon\gamma\epsilon\tau\alpha\iota$] to be like the Equal…” And at \textit{Phaedo} 100c, a beautiful thing is beautiful because “it shares in [$\mu\epsilon\tau\epsilon\gamma\epsilon\iota\alpha$] that Beautiful.” This last verb, $\mu\epsilon\tau\epsilon\chi\omega$, often translated as \textit{I participate}, is one that Plato uses quite often to describe how physical objects come to resemble forms. But at \textit{Parmenides} 132d, $\mu\epsilon\theta\epsilon\xi\varsigma$ is explained as follows. “…this partaking [$\mu\epsilon\theta\epsilon\xi\varsigma\varsigma$] of the forms is, for the other things, simply being modeled [$\epsilon\iota\kappa\alpha\sigma\theta\eta\nu\nu\alpha\iota$] on them [the forms].”\textsuperscript{62} Note the passive voice of the final verb. It turns out that the participation of physical objects in the forms is nothing more than the physical objects’ being modeled after forms. The physical objects are not the causes, but the recipients of the modeling. They are produced by the forms. The

\textsuperscript{60} I do not intend this to be a general account of the relationship between forms and their instances, but only of the relationship between forms and their instances in the \textit{Receptacle}, instances with the status of coming to be. Elsewhere, Plato contemplates the notion that some forms participate in other forms; for example, at 256a in the \textit{Sophist}, Motion is said to participate in Being. Such relationships might be quite different from the relationship between forms and their instances in the \textit{Receptacle}, so I do not intend my analysis here to apply to them.

\textsuperscript{61} Cresswell, 246.

\textsuperscript{62} Leo Sweeney draws attention to the passive voice in this passage and uses it to argue that the forms are causes. Sweeney, “Participation in Plato’s dialogues,” 131-133.
language of “participating,” which seems to put the action on the side of the physical objects is only a metaphorical way of expressing action by the forms. And we should probably interpret the language of “getting a share” and “striving” in the same way.

In fact, there are other passages in which Plato uses the passive voice to describe the role of particulars in relation to forms, thereby making it clear that the forms are the actors. For example, a little further into *Parmenides* 132d, Socrates asks, “can that form not be like what has been modeled [εἰκασθέντι] on it, to the extent that the thing has been made like [ἄφωμοιώθη] it?” And at *Greater Hippias* 289d, it is by Beauty itself that “everything else is beautified [κοσμεῖται].” Only a few paragraphs later in the same dialogue (at 294d), Plato uses the language of “making” to describe the role of a form, again making it clear that the form is the actor. “Therefore, if the appropriate is what makes [ποιοῦν] things fine, it would be the fine we’re looking for…. So in this dialogue, the forms are the active causes of their instances.

Of course, one might object that the actor producing particulars is not the forms, but the Receptacle. In ordinary mirror imaging, it could be argued that the images are produced by the mirror. But in the previously discussed passage on mirror imaging from *Republic* X, the mirror does not simply produce images of whatever happens to be in front of it. Instead, it produces images of that toward which it has been turned. The emphasis in the passage is not on what the mirror does, but on the productive role of the one who manipulates the mirror. The one who turns the mirror is responsible for it imaging this rather than that, and for imaging it here rather than there.

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63 50c-d acknowledges the role of the Receptacle in producing the cosmos, but likens the Receptacle’s role to that of a mother, while the fatherly role is given to the model. If, as Plato would have, we understand the father’s role in reproduction to be active and the mother’s to be passive, this suggests that the model is the active producer, whereas the Receptacle plays a passive role.
than there. The hand that turns the mirror is the hand that rules the world of imagery. So while the mirror plays an important role in the production of images, the one who turns the mirror is the primary producer of images.

If, as the passage says, the Demiurge’s crafting of the world is like this, then the images in the Receptacle are not produced by the Receptacle alone, or even primarily, but by the Demiurge. He is the primary producer, since he orders the images in the Receptacle, determining what will be imaged in it and where, in accordance with what is best. So if, as I have argued, the forms are the Demiurge, then the forms are the primary producers of the images in the Receptacle. They produce the order of the cosmos by, in some sense, turning the Receptacle toward themselves. And since they produce their images in the Receptacle, they do something productive. Therefore, they fit our definition of an active cause.

3. Beyond the *Phaedo* and *Timaeus*

Before concluding this chapter, I would like to present a few brief pieces of evidence from beyond the *Phaedo* and *Timaeus* to show that Plato held the forms to be active causes.

Let’s begin with the form of the Good. In the *Republic*, Socrates says,

…this [the sun] is what I call the offspring of the good, which the good begot [ἐγέννησεν] as its analogue. (508b)

64 Casting an image in the mirror and turning the mirror are obviously metaphorical, since the Receptacle is not literally a mirror, the Demiurge is not literally standing across from it, and the Demiurge is not literally turning it. Naturally, we would like to have a more literal explanation of what the forms are really doing. But as I discussed at the end of the second chapter, our causal language derives from our experiences of horizontal causation in the physical world, and it constrains us to talk about vertical causation between ontologically different layers of reality via metaphor.

65 Robinson takes this passage to mean that the Good has something “very like efficient causality,” or at least “causal efficacy.” Thomas M. Robinson, “Socrates, Anaxagoras, Nous and Noesis,” *In Plato’s Phaedo*:
So that what gives [παρέχων] truth to the things known and the power to know to the knower is the form of the good. (508e)

The form of the Good both begets and gives. Further, at Republic 509d, Socrates describes the form of the Good as sovereign. Comparing the Good and the sun, he says, “…there are these two things, one sovereign [βασιλεύειν] of the intelligible kind and place, the other of the visible…” This term suggests that the Good is not simply the highest of the forms, but actually rules them, just as the sun rules over the visible things. In the Allegory of the Cave, in which the sun is the analog of the Good, Socrates speaks of the freed prisoner’s acquaintance with the sun, saying, “…the sun provides the seasons and the years, governs [ἐπιτροπεύων] everything in the visible world, and is in some way the cause [αἴτιος] of all the things he used to see” (516b). If the sun is like the Good, then the Good must govern the intelligible realm. So the Republic tells us that the Good does things. It begets, gives and governs.

If we accept that the virtues are forms, as Justice seems to be in the Republic, then additional examples of forms doing things are easily found. For example, in Charmides, ποιέω is predicated of Temperance three times between 160d and 161a:

…when you have decided what effect the presence of temperance has upon you [σε ποιεῖ] and what sort of thing it must be to have this effect, then put all this together and tell me clearly and bravely, what does it appear to you to be? (160d)

…temperance seems to me to make [ποιεῖν] people ashamed and bashful…. (160e)

But temperance must be a good if it makes [ποιεῖ] those good in whom it is present…. (161a)

In addition to the doing verbs that Plato predicates of forms, we have seen that in the Timaeus, he ascribes power (δύναμις) to them. But this is also true beyond the Timaeus. For

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66 Teloh does not treat virtues as forms. However, he writes extensively throughout his article about the doing words Plato uses to talk about the “powers” of virtues. Teloh, “Self-Predication.”
example, in the Republic, he ascribes power to the Good, and in Laches, he ascribes it to Courage:67

…the good is not being, but superior to it in rank and power [δυνάμει]. (Republic 509b)

What power [δύναμις] is it which, because it is the same in pleasure and in pain and in all other cases in which we were just saying it occurred, is therefore called courage? (Laches 192b)

Again, the idea that forms have power suggests that they are not merely inert models, but instead play a causal role.

In the Sophist, the Eleatic Visitor and Theaetetus discuss whether, as some claim, only bodies have being, or as the friends of the forms claim, only forms have being. The Visitor says that

…a thing really is if it has any capacity [δύναμιν] at all, either by nature to do [πουλέω] something to something else or to have even the smallest thing done to it [παθεῖν] by even the most trivial thing, even if it only happens once. I’ll take it as a definition that those which are amount to nothing other than capacity [δύναμις]. (247d-e)68

The implication is that the forms only have being if they have the power (capacity) to do something or to have something done to them.

But which is it? Do they do something or is something done to them? The text goes on to hint at an answer.69 At 248a-b, Theaetetus, defending the friends of the forms, affirms that “being always stays the same and in the same state.” He then has the following exchange with the Eleatic Visitor.

Visitor: Well then, do you say that knowing and being known are cases of doing, or having something done, or both? Is one of them doing and the other having something done? Or is neither a case of either?

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67 Teloh discusses Plato’s ascription of δύναμις to virtues and to the Good on pages 18-21.

68 The italics here are not mine, but appear in White’s translation.

Theaetetus: Obviously neither is a case of either, since otherwise they’d be saying something contrary to what they [the friends of the forms] said before.

Visitor: Oh, I see. You mean that if knowing is doing something, then necessarily what is known has something done to it. When being is known by knowledge, according to this account, then insofar as it’s known it’s changed by having something done to it – which we say wouldn’t happen to something that’s at rest.

Theaetetus: That’s correct. (248d-e)

Theaetetus is concerned that if knowing is a case of doing, then when a knower knows the forms, he does something to them. And if he does something to them, this will change them. But that would contradict his earlier affirmation that being cannot change. So in order to protect the forms from having anything done to them, he denies that knowing is a case of doing. Since 247d-e established that being must either do something or have something done to it, Theaetetus’ denial that anything can be done to forms implies that they must do something if they are to have being.

Lesley Brown has suggested that 248d-e hints at one thing the forms are doing, since careful readers will see that Theaetetus and the Eleatic Visitor have misidentified the doer involved in knowing.

…is it not far more plausible to think of coming to know something as being affected by it, rather than us affecting it? Owen rightly acknowledged “the sheer prima facie absurdity of saying that coming to know anything changes it.” …. But it is surely far less absurd to think that I am the one who is affected, and, if you like, changed, when I get to know justice, say, or Pythagoras’s theorem.70

If Brown’s interpretation is correct, then the forms act on knowers, affecting them by bringing about their knowledge.71 This resonates somewhat with the Republic 508e, quoted at the

70 Ibid., 199.

71 Commenting on the same passage in the Sophist, Cargile reaches a similar conclusion. “…what it is to be a circle, point, line, etc. – the form, can have causal influence by influencing the thinking of people.” James Cargile, “On ‘Alexander's’ Dictum, Topoi 22 (2003), 145.
beginning of this section, which claims that the form of the Good gives the power of knowing to
the knower.

Beyond the Platonic texts themselves, Aristotle attributed a causal understanding of the
forms to at least some of the early Platonists. At 335b9-10 in *On Generation and Corruption*, he
criticizes adherents to “Socratic” aetiology as follows. “…some amongst them thought the
nature of Forms was adequate [ικανήν] to account for coming-to-be.”72 In other words,
according to Aristotle, they attributed causation *exclusively* to the forms, allowing nothing else to
be a cause. Aristotle makes this clearer a few lines later (at 335b20-1) when he argues against
them on the ground that “in some instances, we see that the cause is other than the Form.” This
criticism only makes sense if it is directed against the view that the forms alone are causes in the
fullest sense. Of course the Platonic texts do not seem to show that Plato himself held only
forms to be causes. But if that was a prominent view among the first generations of Platonists, it
is difficult to believe that Plato himself did not hold the forms to be causes at all.

As a final thought, I would like to make it clearer why the question of whether the forms
are causes is of fundamental importance in our reading of Plato. Colin Cheyne has published a
book, the thesis of which is that there can be no evidence to support the existence of Platonic
forms.73 Cheyne’s argument is that our knowledge of entities is always based on our “causal
interactions” with them. Some things are known because they reflect light, generate an electrical
field, or impart momentum. We know of gravity because we see the planets in solar orbit or an

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apple falling from a tree. We know of the wind because we feel it on our skin and see the
swaying of the trees. On the other hand, it would be silly to believe that there are silent,
invisible, intangible elves living in my basement. And no one would be taken seriously if he
claimed that there are civilizations of tiny, undetectable people living on the surfaces of
subatomic particles. Such things produce no observable effects, so that we have no justification
for believing in them. According to Cheyne, Plato’s forms are inert, and so they do not bring
about any effects. Therefore, we have no causal interactions with them and thus no basis for
claiming that they exist. Belief in the forms can be no more than silly superstition.

Cheyne’s argument relies on two premises: 1 - that knowledge requires causal interaction
and 2 - that the forms produce no causal interactions. The former seems to be entirely true. So
we are left to make a choice about the latter. If Cheyne is right, that forms produce no causal
interactions, then it difficult to see how the theory of forms can be taken seriously at all. On the
other hand, if forms do produce causal interactions, then the theory of forms might be perfectly
reasonable.

Cheyne’s argument shows that the question of whether the forms are causes is of
fundamental importance in our approach to Plato. And this ought to make us especially grateful
to Plato for providing us with such an abundance of indications that forms are indeed active
causes.

74 Mohr draws attention to the same issue. “The problem, stated generally, is that if entities are of such a status as to
fail to have causal efficacy, then they will be incapable of entering causal chains of events by which it would be
possible to come to know them.” Mohr, Platonic Cosmology, 79. But whereas Cheyne concludes that Platonism
4. Summary

The goal of this chapter was to show that, like the *Phaedo*, the *Timaeus* presents the forms as active causes. First, I turned to Plato’s Demiurge, who is clearly an active cause, since he is described as the “maker” of the cosmos. I argued that the Demiurge cannot be anything other than the forms, but is rather a representation of them. So if the Demiurge is an active cause, then the forms are an active cause.

I then examined the distinction between being and coming to be in the *Timaeus*. Forms are associated with being, whereas physical objects are associated with coming to be. It is not entirely clear how Plato understands the ontological status of coming to be. But he does associate it with the status of being an image. And in particular, I argued that the discussion of the Receptacle indicates that the things that come to be are insubstantial images of the forms. Since with insubstantial images, the original is always causally prior to the image, we can say that forms are causally prior to physical things. This suggests that forms act to make their images. And this means that the forms do something productive, thus showing themselves to be active causes.

Lastly, I provided a few brief pieces of evidence and argumentation to show that even beyond what we have seen in the *Phaedo* and *Timaeus*, there is reason to believe that Plato held the forms to be active causes.

is indefensible, Mohr concludes (as I do) that Plato must have understood the forms to have some sort of causal efficacy.
Chapter Four

Forms as Eternally Changeless Causes

I have argued that Plato understood the forms to be active causes, by which I mean that they do something and thereby bring about an effect in something else. And I have provided textual support for this position. However, the most obvious objection to this idea is not that it lacks textual support, but that it seems wholly incompatible with Plato’s well-established principle that the forms are eternally changeless.

The idea that the forms are eternally changeless appears in both the Phaedo and the Timaeus:

…are they ever the same [ὡσαντος ἀει] and in the same state [κατὰ ταὐτὰ], or do they vary from one time to another [ἄλλοτ᾿ ἄλλως]; can the Equal itself, the Beautiful itself, each thing in itself, the real, ever be affected by any change [μεταβολὴν] whatever? Or does each of them that really is, being uniform by itself, remain the same [ὡσαντος κατὰ ταὐτὰ] and never in any way tolerate any change [ἀλλοίωσιν] whatever?

It must remain the same, said Cebees, and in the same state, Socrates. (Phaedo 78d)

…we must begin by making the following distinction: What is that which always is and has no becoming, and what is that which becomes but never is? The former… is unchanging [ἀει κατὰ ταὐτὰ]…. So whenever the craftsman looks at what is always changeless [τὸ κατὰ ταὐτὰ ἐχοντα ἀει]…. (Timaeus 28a)

This applies both to the things that come to be, and to those that are always changeless [τὰ κατὰ ταὐτὰ ἐξοντα αει]. (Timaeus 37b)

…one was proposed as a model, intelligible and always changeless [ἀει κατὰ ταὐτὰ]…. (Timaeus 48e)

…we must agree that that which keeps its own form unchangingly [τὸ κατὰ ταὐτὰ ξιδὸς ἔχον], which has not been brought into being and is not destroyed, which neither receives into itself anything else from anywhere else, nor itself enters into anything else anywhere, is one thing. (Timaeus 52a)
But if the forms are changeless and eternal, then how can they be causally tied up with the ephemeral, changing things around us?

Already in antiquity, Aristotle saw the changelessness of Platonic forms as problematic for those who take them to be causes. At 335b18-21 of On Generation and Corruption, he wrote, “…if the Forms are causes, why is their generating activity intermittent instead of perpetual and continuous [οὐκ ἄει…ἀλλὰ ποτὲ μὲν ποτὲ δ’ οὖ] – since there always [ἄει] are Participants as well as Forms?” For example, elephants are not generated continuously, but one at a time. At some moments, an elephant is being produced, whereas at others, none is. So if the forms are responsible for the generation of elephants, then they are producing them at some moments but not at others. And this appears to require that the forms oscillate between productivity and non-productivity, and therefore that the forms change over time.

Furthermore, it seems that changeless forms could not cause motion or change. But if they could not cause motion or change, then how could they contribute in any way to the changing world around us? Aristotle draws attention to this problem in the Metaphysics while arguing against the Platonists:1

…they do not suppose… that the Forms… are the source of movement [κινήσεως] (for they say these are causes rather of immobility [ἀκινήσιας] and of being at rest [τοῦ ἐν ἠρεμίᾳ εἶναι φασιν])…. (988b1-4)

Above all one might discuss the question what on earth the Forms contribute to sensible things…. For they cause neither movement [κινήσεως] nor any change [μεταβολῆς] in them. (991a9-11)

In arguing that Plato did not intend the forms to be causes, Vlastos too considers the difficulties that would follow from attributing causal agency to eternally changeless entities. In “Reasons and Causes in the Phaedo,” he writes,

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For since all forms are absolutely free of spatio-temporal limitations, then if any of them were supposed to be acting on a particular spatio-temporal object, \( a \), with a determinate property, \( P \), we would have to suppose (i) that it is also acting on all other objects in the universe, including those which do not have the property \( P \), and further (ii) that all other Forms, including Forms corresponding to properties contrary to \( P \), are simultaneously acting on \( a \). How then (i) could the given Form have that specific causal effect on \( a \) which would account for its being \( P \) rather than not-\( P \)? And how (ii) could it have any determinate effect on \( a \) at all, if all those other Forms are simultaneously acting on \( a \) with contrary effect? The only way to avoid the absurd consequences of the supposition would be to credit Forms with the power to act selectively on different objects in the universe, directing their causal influence to some of them, withholding it from others. And how could Plato have so particularized his Forms as causal agents in the world of space and time without fouling up the most fundamental of his metaphysical principles?²

I take “the most fundamental of his metaphysical principles” to be, at least in part, a reference to the eternality of the forms and to their lack of location. How could an eternal form with no particular location restrict its effect to this object at this time?³ And how could the opposite form refrain from bringing about the opposite effect in the same object at the same time? Such selective activity toward spatio-temporal objects seems to require that the forms be tied up with space and time in a way that is incompatible with their eternality.

At first, it is hard to see how the forms can be both causal agents and eternal, and in my judgment, this difficulty poses the most important challenge to my interpretation of Plato’s aetiology. Therefore, I will devote my final chapter to showing that this difficulty is not insurmountable, and that the eternality of the forms is compatible with their roles as causal agents. Although Plato never discussed this issue explicitly, I will show that the elements of a solution can be extrapolated from his writings, principally from the *Timaeus*.


³ The same issue is raised by Menn. “Since the forms are eternal, immutable, and nonspatial, it seems that they must at all times be equally disposed toward all regions of space: they cannot be inclined, of themselves, to incarnate themselves now here rather than there.” Menn, 4.
1. The Eternally Changeless Cause in the Statesman

Vlastos has suggested that the idea of an eternally changeless cause is too absurdly contradictory for Plato to have held it. So I would first like to offer evidence that eternally changeless causes were neither inconceivable to the ancient Greek mind in general nor to Plato in particular.

To begin, I point to the Septuagint, a translation of the Hebrew scriptures into Greek, begun little more than a century after Plato’s death. For the Jews, God was the all-powerful governor of the cosmos. Yet at least two books of the Septuagint conceived of God as eternally changeless as well, and expressed the idea in terms similar to those used by Plato to describe the eternal changelessness of the forms:4

In the beginning, O Lord, You founded the earth,
And the heavens are the works of Your hands.
They shall perish, but You shall remain.
And all things shall grow old like a garment,
And like a cloak You shall change them,
And they shall be changed;
But You are the same [αὐτός], and Your years shall not fail.
(Psalms 101:26-28)

For I am the Lord your God; I have not changed [οὐκ ἠλλοίωμαι]. But you, O sons of Jacob, have not abstained. (Malachi 3:6)

So the notion of an eternally changeless causal agent is not, as Vlastos implies, so absurdly contradictory as to have been inconceivable to the ancient Greek mind.

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4 English translations are taken from Saint Athanasius Academy, Orthodox Study Bible (Nashville: Thomas Nelson, 2008). The Greek text is from Αγία Γραφή (Athens: Αδελφότης Θεολόγων Η «Ζωή», 1998). In the Western numbering convention, Psalm 101:26-28 is Psalm 102:25-27. The precise meaning of the adjective αἰώνιος is controversial, but if it too is taken to imply changelessness, then there are further significant parallels between the description of the Living Thing as αἰώνιος at 37d and the following verses in the Septuagint: Genesis 21:33 (“Abraham…called on the name of the Lord, the eternal God”), Deuteronomy 33:27 (“And who is under the strength of the everlasting arms….”) and Isaiah 40:28 (“The everlasting God, the God who created the ends of the earth, neither hungers nor is weary.”). Two additional verses use αἰώνιος: Psalm 89:2 [90:2 in Western numbering] (“And from everlasting to everlasting You are.”) and Psalm 144:13 [145:13 in Western numbering] (“Your kingdom is a kingdom of all the ages, And your dominion is from generation to generation.”)
In fact, an eternally changeless cause can be found in Plato as well, accompanied by an explicit discussion of how it can be both a cause and changeless. At Statesman 269c-270a, a changeless God is said to guide the rotation of the cosmos. The Eleatic Visitor explains that this rotation is sometimes in the forward direction, sometimes backward. But this poses a problem because God is changeless, and therefore it does not seem that He can be responsible for guiding the rotation of the cosmos in two opposite directions:

Remaining permanently in the same state and condition, and being permanently the same [τὸ κατὰ ταῦτα καὶ ὀσσῶτος ἔχειν ἀεὶ καὶ ταῦτόν], belongs only to the most divine things of all….
To turn itself by itself forever is, I dare say, impossible for anything except the one who guides [ἦγομένοι] all things which, unlike him, are in movement; and for him to cause movement now in one way, now in the opposite way is not permitted. (Statesman 269d-e)

And of course the reason why it is not permitted is that guiding the cosmos in two different directions at two different times would introduce change into the changeless God.

But if God cannot change, how does the cosmos that he guides change its rotational direction? The Eleatic Visitor answers the question in this way:

This universe the god himself sometimes accompanies [συμποδηγεῖ], guiding it on its way [πορεώμενον] and helping it move in a circle [συγκυκλεῖ], while at other times he lets it go [ἀνῆκεν], when its circuits have completed the measure of the time allotted to it; then it revolves back in the opposite direction…. (Statesman 269c-d)

…at times it is helped by the guidance [συμποδηγήσθαι] of another, divine, cause, acquiring life once more and receiving immortality from its craftsman, while at other times, when it is let go [ἀνεθῇ], it goes on its own way…. (Statesman 270a)

So rather than guiding the cosmos in two different directions, God only guides the cosmos in one direction. As long as He guides the cosmos, it turns in that one direction, but when He lets it go, it turns in the other. This allows God to remain changeless as to which direction He turns the cosmos, while at the same time explaining how the cosmos that He guides can change its direction.
God is an active cause since He produces an effect (the turning of the cosmos) by doing something ("accompanying," "guiding," and "helping"). Even when the cosmos turns in the backward direction, it is not because it has broken free of God, but because it has been "let go" by Him (note the passive voice of the verb at 270a). The fact that Plato presents this solution explicitly demonstrates that, contra Vlastos, the idea of an eternally changeless active cause is not too absurdly contradictory for Plato to have held it. It further shows that Plato himself contemplated how such a thing could be possible. And since Plato has begun to show us how this active cause can nevertheless remain changeless in itself, he has provided us with a hint about how other eternally changeless principles, such as the forms, might be causes too.

In fact, this account seems very much like the explanation of coming to be and destruction given in the *Phaedo*. There, we saw that forms approach [ἐπειμι] or come to [ἔρχομαι] things, occupy [κατέχω] them, bind [συνδέω] them and hold [συνόχωκα] them, compelling [ἀναγκάζω] them to be what they are. In other words, forms act as causes by asserting their guidance over things. And those things are destroyed when the forms let them go, perhaps due to the approach of an opposing form:

…it seems that these do not admit that Form which is opposite to that which is in them; when it approaches them, they either perish or give way. (104c)

Thus it is possible for forms, like the God of the *Statesman*, to be active causes in the cosmos, while remaining eternally changeless themselves. Since each of them only ever produces one sort of effect, their changelessness is not contradicted.

But does this solution truly avoid introducing change into eternal causes? It is true that the God of the *Statesman* is only said to turn the cosmos in one direction, and that each form

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5 See chapter 2, section 4 of this dissertation.
only produces one effect. So in that respect, God and the forms remain eternally changeless. But it also seems that God oscillates between guiding and letting go, and that each form changes from approaching a thing, when the thing is generated, to letting it go when it is destroyed. This is the problem of intermittent generating activity raised by Aristotle, and the problem of temporal particularization raised by Vlastos. So if we are to resolve these difficulties, much more needs to be said.

2. The Related Problem of Spatial Particularization

If forms are eternally changeless, how can they be causally tied up with temporal objects? As we have seen, Vlastos connects this question with the parallel questions of how they could possibly act on one object while not acting on another, or in one place while not in another. So it is both unclear how they particularize themselves in time and how they particularize themselves in space. Though the first of these questions is the focus of this chapter, answering the second question will provide important clues as to how we might answer the first. So I will begin by offering a solution to the problem of spatial particularization.

In the second section of the previous chapter, I provided evidence from the *Phaedo*, *Timaeus* and *Sophist* to show that Plato does not conceive of the forms as independent from each other, but rather as an interwoven whole. And since the Demiurge desired that the cosmos should resemble this model, he did not create the cosmos as a heap of independent, unrelated images of forms, but instead as a unified whole. This point is made explicitly several times in the *Timaeus*. Below are only a few examples:
…what living thing did he make it resemble? Let us not stoop to think that it was any of those that have the natural character of a part…. he made it a single [ἕν] visible living thing…. (30c-31a)

They [the four elements] bestowed friendship upon it, so that, having come together into a unity with itself [ταῦτα ὑπὸ συνελθόν], it could not be undone by anyone but the one who had bound it together. (32c)

…it is why he concluded that he should fashion the world as a single whole [ἄλογον ἄλογον]…. (33a)

He spread the gods throughout the whole heaven to be a true adornment for it, an intricately wrought whole [πεποικιλμένον εἶναι καθ᾽ ἄλογον]. (40a)

The cosmos is a whole, not a dissociated heap, and this tells us something about how the Demiurge used his model (which I have argued was himself). He did not simply look to the form of Apple and then make a number of apples, or to the form of Fish and then make a number of fish, etc. Instead, he looked to the model as a whole, and from it, he created the cosmos as another whole.

Part of my evidence that the forms constitute an interwoven whole was that they have ordered relations to each other. (E.g. Nothing can possess the form of Fire without also possessing the form of Heat.) And because of the internal order of the model, the Demiurge gave order to the cosmos as well.6 In fact, the order of the cosmos is reflected in calling it a cosmos at all. But there are also several passages in the Timaeus that explicitly express the Demiurge’s ordering of the cosmos:

…[the god] brought it from a state of disorder [ἀταξίας] to one of order [τάξιν], because he believed that order was in every way better than disorder. (30a)

This is the reason why these four particular constituents [the four elements] were used to beget the body of the world, making it a symphony of proportion [δὴ ἀναλογίας ὁμολογήσαν]. (32c)

And in particular, as to the proportions [ἀναλογιῶν] among [the elements’] numbers, their motions and their other properties, we must think that when the god had brought them to complete and

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6 Ordered relations in the cosmos also follow from the fact that there are forms of relations. For examples, see the form of Equality in Phaedo 74a, and the forms of the Same and the Different at Sophist 254e. But here I am particularly concerned with the sort of order that results from using a model which is itself an ordered whole.
exact perfection (to the degree that Necessity was willing to comply obediently), he arranged them together proportionately [ἀνὰ λόγον]. (56c)

…the things we see were in a condition of disorderliness [ἀτάκτως] when the god introduced as much proportionality [συμμετρίας] into them and in as many ways – making each thing proportional both to itself and to other things – as was possible for making them be commensurable [ἀνάλογα] and proportionate [σύμμετρα]…. all these things [the elements], rather, the god first gave order to [διεκόσμησεν], and then out of them he proceeded to construct the universe…. (69b-c)

So the cosmos not only reflects the unity of its model, but the model’s order as well. The Demiurge used an ordered whole as his model and made the cosmos as an ordered whole as well.

Now imagine the following. Suppose that a painter were asked to produce a painting of a particular woman’s face. So he first studied her nose, eyes, ears, mouth and other features. Then recognizing that her face is an ordered whole, he determined that the features in his painting should be an ordered whole as well. So as he painted the face, he arranged the features in order of size, from mouth on the left to freckles on the right. And having created an ordered whole that perfectly replicates each feature of another ordered whole (the face), he proudly presented his painting to us. Could we say that he had successfully produced a painting of the woman’s face? Certainly not! The result could hardly be called a face at all. It would have been better for the painter to have copied the features poorly, if only he had ordered them in the proper way.

I present this image in order to make two points. The first is that when an artist replicates an ordered whole, it is not enough to produce some sort of order. The order of the product must be the same as, or derived from, the order of the model. We would be dissatisfied with the urban cartographer who perfectly drew all of a city’s buildings, but ordered them on the map by height rather than by location. However, we are satisfied when cartographers use top to bottom ordering in place of North to South ordering, and left to right ordering in place of West to East ordering because these orderings are analogous to the originals. So it is essential that the order
of an image be the same as or derived from the order of the original. My second point is that when one is imaging an ordered whole, capturing the order of the model is of much greater importance than perfectly replicating each feature.

So we should not think that the Demiurge looked to the ordered whole of the forms, replicated each one individually, and then arranged the products according to some completely new sort of order. Rather, we should hold that the paramount concern of the Demiurge was to mirror the order of the forms, and only secondarily was he concerned with replicating the forms individually. Therefore, wherever there are ordered relations within the cosmos, we ought to think that they reflect the ordered relations among the forms, for apart from the Demiurge, the universe was in a state of ἀταξία.

It follows from this that the spatial order of things somehow images the order of the forms. And we can say this without suggesting that the forms themselves have spatial ordering. They need only contain an order to which spatial order is analogous, or from which spatial order is derived. For example, the form of Triangle has no spatial ordering within itself, but it requires that there be a specific spatial ordering within any particular triangle. The form demands that each corner of a triangle be opposite a side, and that the longest side be opposite the widest angle. This spatial ordering is derived from the form, even though the form itself is not spatial at

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7 I only claim that the spatial order of the cosmos is derived from the forms. It may be that there are other factors that contribute to the mere placements of things, though in a disordered way. For example, at Timaeus 52e, we are told that the Receptacle “sways irregularly,” like a “winnowing sieve,” and that this accounts for much of the placement of things in the cosmos. However, my aim is not to show that the forms are the only factors that play a role in the placements of objects, but rather to show that despite lacking location, they still play a role in the spatial ordering of the cosmos.
Likewise, there is no spatial order between the forms of Planet and Moon (if there are such forms). But they bear a relationship to each other such that wherever there is a moon, it will be in orbit around a planet. So whenever a particular moon orbits a particular planet, the spatial ordering between them is derived from a relationship between their forms. And even though the relationship between the forms of Mountain and Valley is not a spatial relationship (again assuming that such forms exist), it requires that every mountain be adjacent to a valley and every valley adjacent to a mountain. Therefore, it is possible for at least some of the spatial relationships among things to be derived from the non-spatial properties of and relations between their forms. And this provides a way for us to understand how the forms can particularize themselves in space, acting here but not there, on this object, but not on that one.

For example, at 103c-105c in the *Phaedo*, we are told why the form of Heat is present in one place, but absent in another. The form of Fire always brings along the form of Heat with itself, so that wherever there is a fire, there will be heat as well. But the form of Snow precludes the form of Heat, so wherever there is snow, as long as it remains snow, it cannot be hot. Therefore, the form of Heat will be imaged in one place, but not in another, due to the relationship that it has to other forms. Likewise, the same passage tells us that due to the

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8 In the *Republic*, Socrates himself makes the point that geometric figures are images of the forms and that claims made about them are more properly claims about the forms themselves. “Then you also know that, although they [geometers] use visible figures and make claims about them, their thought isn’t directed to them but to those other things that they are like. They make their claims for the sake of square itself and the diagonal itself, not the diagonal they draw, and similarly with the others. These figures that they make and draw… they now in turn use as images, in seeking to see those others themselves that one cannot see except by means of thought.” (510d-e)

9 Stephen Menn points out that, taken by itself, the explanation of the spatial particularization of Heat in the *Phaedo* is inadequate. Heat is particularized by its relations to other forms, such as Fire and Snow. But how are Fire and Snow particularized? To explain this, Plato would have to appeal to the relations that these forms have to still other forms. And it seems that this would only be the beginning of an infinite regress. Therefore, Plato’s account of spatial particularization in the *Phaedo* is insufficient “if we want to explain why different parts of matter should come in the first place to participate in different forms, not randomly but in an orderly and rational way.” (p. 4)
relationships among the forms, the Cold must be present wherever there is snow, but cannot be where there is fire, as long as it remains fire.

The passage also tells us that when Fever is present in a body, it brings along Sickness. This implies that fevered bodies will also be sick bodies, while non-fevered bodies need not be sick (though they might be, due to the presence of some other form that brings along Sickness with itself). Therefore, the form of Sickness acts selectively, sickening fevered bodies, while not sickening others. So forms can act selectively, here but not there, on this object but not on that one, and this is due to the interrelated order of the forms and the imaging of that order in the cosmos.

This solution nicely responds to Vlastos’ concerns about the selective action of forms. First, as we have seen, he asks, “How then (i) could the given Form have that specific causal effect on a which would account for its being $P$ rather than not-$P$, without having the same effect on all other objects, including those which are not-$P$?” The answer is that $a$ is part of an entire cosmos, the order of which reflects the internal order of the forms. And the reflection of that order requires that some objects be $P$, while others be not-$P$. Each object is $P$ or not-$P$ because of its relations to other forms that necessitate or preclude that it be $P$, but more fundamentally because that object must be $P$ or not-$P$ so that the order of the forms can be manifested in the order of the cosmos.

However, according to my interpretation, the ultimate grounding of spatial particularization is the non-spatial ordering among the forms considered as a whole. These interrelationships are mirrored in the order of the cosmos considered as a whole. And the interrelationships between the forms, as we have seen, are already present in the Phaedo. So Menn’s concern about an infinite regress is unwarranted.

Secondly, Vlastos asks, “And how (ii) could it [the form] have any determinate effect on a at all, if all those other Forms are simultaneously acting on a with contrary effect?”\textsuperscript{11} We can now see that the mistaken assumption in this question is that all of the forms are individually acting simultaneously on a. If we see a as part of a cosmos that reflects the internal order of the forms, then that internal order could easily determine that the form that causes a to be P should act on it, while the form that would cause it to be not-P should not.

Of course, all of this creates a rather static picture of the cosmos. The forms are eternally changeless, so their order is ever the same. And if the spatial order of the cosmos must reflect the order of the forms, then it seems that the cosmos should never change either. So we are naturally led back to the central question of this chapter: how can eternally changeless forms be causes in an ever changing cosmos? And that is a question that we are now in a far better position to answer.

3. Time as a Moving Image of Eternity

In the previous section, I argued that ordered spatial relations are derived from the inner order of the forms. And that was the key to understanding how forms particularize themselves in space. In this section, I will apply the same line of reasoning to ordered temporal relations, showing that they are derived from the inner order of the forms. And that will be the key to understanding how, while remaining eternally changeless, forms can be active causes in the cosmos.

\textsuperscript{11} Ibid.
I begin by turning to the claim in the *Timaeus* that time is an image or imitation of eternity:

And so he began to think of making a moving image of eternity [εἰκόνα... κινητόν τινα αἰώνος]: at the same time as he brought order to the universe, he would make an eternal image [αἰώνον εἰκόνα], moving according to number, of eternity [αἰῶνα] remaining in unity. This number, of course, is what we now call “time.” (37d)

These, rather, are forms of time that have come to be – time that imitates eternity [αἰῶνα μιμουμένου] and circles according to number. (38a)

And it [time] came to be after the model of that which is sempiternal [κατὰ τὸ παράδειγμα τῆς διαιωνίας φόρμας], so that it might be as much like its model [ὁμοιότατος αὐτῷ] as possible. (38b-c)

The purpose [in creating time] was to make this living thing as like as possible [ὁμοιότατος] to that perfect and intelligible Living Thing, by way of imitating its sempiternity [πρὸς τὴν τῆς διαιωνίας μίμησιν φόρμας]. (39d-e)

But what does it mean to say that time was made to be an image or imitation of eternity?

In the first place, it cannot mean that time, in the simple sense of duration, was brought into being as an image of eternity. The passage on the creation of time is introduced with these words, “Now when the Father who had begotten the universe observed it set in motion and alive….” (37c) But how could it have been in motion if there was not yet any duration? Since motion without duration would be impossible, this passage cannot concern the origin of duration. Furthermore, as Vlastos points out, the Demiurge’s purpose was to make the cosmos more like eternity. But

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12 The same problem is raised by 30a, where we are told that before the Demiurge brought the cosmos into order at all, it was “not at rest but in discordant and disorderly motion.”

13 My argument does not rely on the historical reality of pretemporal motion, but only on the fact that it is mentioned at this point in the text. Even if one were to argue that because the entire creation account is a myth, no pretemporal motion ever truly existed, its mention here would still be evidence that this particular passage is not concerned with the creation of duration.

14 Vlastos’ analysis is also endorsed by John Whittaker in “The ‘Eternity’ of the Platonic Forms,” *Phronesis* 13 (1968), 137-8 and by Richard Mohr in *The Platonic Cosmology*, 60.
had there been no temporal passage before creation, matter would have been totally
immune from flux and would thus have had the absolute stability of the Ideas; and in that
case the creation of time would have made it far less like the Ideal model, than it would
otherwise have been.\textsuperscript{15}

So it is clear that this passage in the \textit{Timaeus} is not intended to describe the creation of time in
the sense of duration.\textsuperscript{16}

It is also clear that the passage does not mean to say that time, in the sense of change, was
brought into being as an image of eternity. One might envision that prior to the creation of time,
there was duration, but duration in which nothing ever changed. From that, it would follow that
the creation of time was really only the introduction of change. But that too is precluded by the
claim at 37c that the cosmos was already in motion. And again, Vlastos is helpful:

\begin{quote}
It is the nature of the Demiurge to make his work more like the eternal model, not less like it. So
the one thing he could not possibly do is to bring the factor of change and decay, of ‘perpetual
perishing’, into existence.\textsuperscript{17}
\end{quote}

Because the introduction of change would have made the cosmos less like its eternal model,
rather than more like it, it is simply not possible that the creation of time in this passage was the
creation of change.

But if time made in the image of eternity was neither duration nor change, then what
could it have been? The answer is given at the very beginning of the passage when, at 37d, we
are told that “at the same time as he brought order to the universe [διακοσμ\̄ων… οὐρανόν], he
would make an eternal image, moving according to number….” The creation of time was a


\textsuperscript{16} I do not exclude the possibility that duration was created by the Demiurge, a question on which I do not presently wish to weigh in at all. I am simply arguing that this particular passage in the \textit{Timaeus} cannot be meant to describe the creation of duration.

companion effort to the ordering of the heavens, and the two ends were accomplished in tandem. If the universe was to be like its model, it needed to reflect the model both in its arrangement and in its motion, i.e. both spatially and temporally. And so the creation of time as an image of eternity simply means the ordering of motion in imitation of eternity. After the creation of time, the cosmic motions were no longer chaotic, but ordered according to number. This explains why the creation of time is presented primarily in terms of setting the heavenly bodies on ordered courses, and why, at 39d, we are told that “time is really the wanderings of these bodies….” The creation of time is the ordering of motion.

In the previous section, I argued that when an artist produces an image of an ordered model, the order of the image is derived from the order of the model. And so it follows that if the Demiurge makes an image of eternity by ordering motion, the order of the motion must be derived from the order of eternity, i.e. from the order of the forms. I do not mean by this that whenever one occurrence succeeds another, this reflects the order of the forms. Instead, what I mean is that whenever there is ordered succession, ordered motion, it reflects the order of the forms. I will soon be more precise about the sort of order I have in mind, but for now, I simply want to establish that in some way, the order of time reflects the order of eternity.

Perhaps the best evidence for this in the Timaeus is at 19b. Here Socrates explains his feelings about the city they had discussed on the previous day:

My feelings are like those of a man who gazes upon magnificent looking animals, whether they’re animals in a painting or even actually alive but standing still, and who then finds himself longing

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18 Vlastos reaches essentially the same conclusion. “Without uniform motion time cannot be numbered, and if it cannot be numbered is it still time? …It is only when the regular motion of the heavenly bodies comes into being that time begins” (“The Disorderly Motion,” 387). Elsewhere, he succinctly defines Plato’s understanding of time as “uniform and measurable time-flow,” made measurable and uniform by the periodic motions of the heavenly bodies. “Creation in the Timaeus,” 410.
to look at them in motion or engaged in some struggle or conflict that seems to show off their distinctive physical qualities.

There is an intentional parallel between this passage and 37d, where time is said to be a moving image of eternity. Both passages express the notion of putting something unchanging into motion. And at 19b, it is clear that at least some of the motion of the city would simply be an unfolding of what is already included in the idea of the city. As Socrates describes the city, he mentions many of its temporal processes, which are presumably, at least in part, what he would like to see in motion. For example, at 18a, the guardians “were to be given both physical and cultural training.” At 18d, “the rulers, male and female, should secretly arrange marriages by lot,” and at 19a, “the children of the good parents were to be brought up, while those of the bad ones were to be secretly handed on to another city.” Furthermore, if we turn back to the Republic, where the city was first described, we find an account of how it comes to be at 369b and an account of how it deteriorates into a timocracy at 545c-547c. Since this city is an idea, rather than a physical city, it is changeless. Nevertheless, the idea of the city includes quite a number of temporal processes. So Socrates’ desire to see this city in motion is a desire to watch the unfolding of processes already contained in the idea itself. And if, as I suggest, 37d is meant to parallel 19b, then we should also think that when the Demiurge makes time as a moving image of eternity, he orders motion in such a way as to unfold processes that are already contained in eternity. So ordered motion reflects the order of the forms.

Perhaps the most noteworthy opponent of this view is Richard Mohr, who argues that in creating time, the Demiurge only gave ordered motion to the heavenly bodies, not to the cosmos as a whole. According to his interpretation, “what the Demiurge does is to improve the world’s intelligibility by introducing into the phenomenal realm standards, measures, or paradigm
And so he improved the intelligibility of duration by making “the various planets and other celestial bodies treated as standards for measuring that which is measurable.” The regular motions of the celestial bodies make it possible to measure duration in terms of days, months and years, etc. Before the creation of time, it would have been impossible to measure the duration of anything, or the length of time between two things. But once these regular motions were in place, it became possible to say that a festival had lasted 3 days, or that a friend had not visited for 8 years. And the ability to measure duration surely improved the intelligibility of the world. In short, Mohr holds that “when Plato says that the Demiurge makes time, he means that the Demiurge makes a clock, nothing more, nothing less,” where a clock is understood to be “a regularly repeating motion with some marker which makes possible the counting of the repetitions.” So according to Mohr, the creation of time was only the ordering of the motions of the celestial bodies so that they could serve as standards for measuring the durations of all other things.

However, Mohr’s conclusion, that only the celestial bodies were ordered, rests on the premise that the Demiurge’s sole purpose in creating time was to “improve the world’s intelligibility,” and that claim is not supported by the text. In fact, the text is quite explicit about the Demiurge’s true purpose, which extended much further:

…he thought of making it more like its model still. (37c)

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19 Mohr, The Platonic Cosmology, 55.
20 Ibid., 57.
21 Ibid., 54.
22 Ibid., 58.
And it came to be after the model of that which is sempiternal, so that it might be as much like its model as possible. (38b)

the purpose was to make this living thing as like as possible to that perfect and intelligible Living Thing…. (39e)

The Demiurge’s purpose in creating time was not simply to improve the world’s intelligibility, but rather to make the world more like its model. The closest the text comes to supporting Mohr’s claim is at 39e. Yet even there, the passage does not say that the Demiurge’s purpose was solely to make the world more intelligible, but rather to make it more like its model, which was intelligible. That effort would probably entail improving the world’s intelligibility (why else would the intelligibility of the model be mentioned?), but would go beyond that. Making the world more like its model would require more than putting standards into place by which the world could be measured. It would necessitate a fundamental ordering of the world itself. And this would involve more than the mere establishment of a celestial clock.

Mohr offers two arguments against those of us who “confuse Platonic time with the sheer orderliness of the world,”23 i.e. those who see time as an order imposed across the cosmos, rather than as a means of measurement. First,

…Plato would not repeatedly say that the ordered heavens and time came into being simultaneously (37d5-6, 38b6), if he in fact meant that they were one and the same thing, thus rendering otiose any claim about their simultaneity. 24

However, interpreting time as a type of cosmic order does not require us to conflate the order of the heavens with the order of time. The distinction is that the “ordered heavens” refers to a

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23 Ibid., 70. One of Mohr’s targets here is W. von Leyden, who describes the Platonic conception of time as “the all-inclusive system of orderliness in nature.” “Time, Number, and Eternity in Plato and Aristotle,” *Philosophical Quarterly* 14 (1964), 35-52. Another target is Harold Cherniss, whom Mohr quotes describing time as “the rational aspect of orderliness in the phenomenal realm by which the flux of becoming can simulate the eternity of real being.”

24 Ibid., 70.
spatial ordering, whereas the order of time refers to a chronological one. So it is perfectly possible to interpret time as a sort of cosmic order, while still maintaining its distinctness from the order of the heavens.

Secondly, Mohr argues that “…there is no suggestion that all ordered objects of the Demiurge’s formation (e.g. souls, human bodies, plants, metals) are in some sense components (either formal or material) of Platonic time viewed as a system.”25 While I agree that the text never says this explicitly, I disagree that there is no suggestion of it. It is true that in describing the creation of time, the text only discusses the creation of celestial bodies. However, the concern of the *Timaeus* is not to explain each thing in the cosmos individually, but rather to identify first principles. And the celestial bodies are just such entities, serving as first principles of a temporal order that extends beyond themselves. The text does not conceive of these bodies as inert balls of gas, rock or metal (such a modern conception was unavailable to Plato). Instead, they are living things, “bound by bonds of soul” and “begotten with life” (38e). And as such, they “stand guard [φυλακὴν]” over time (38c) and “cooperate in producing time [τῶν ὅσα ἐδει συναπεργάζεσθαι χρόνον]” (38e). The fixed stars, at least, were created in such a way that they “would always think the same thoughts about the same things” (40a). And by the end of the passage on the creation of time, the celestial bodies are repeated called gods or divine:

Now there are four of these kinds: first, the heavenly race of gods [θεῶν]…. (39e)

The gods [θείου] he made mostly out of fire…. (40a)

This, then, was the reason why all those everlasting and unwandering stars – divine living things [ζῷα θεία ὅντα] which stay fixed by revolving without variation in the same place – came to be. (40b)

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25 Ibid.
To describe the dancing movements of these gods [θεῶν], their juxtapositions and the back-circlings and advances of their circular courses on themselves; to tell which of the gods come into line with one another at their conjunctions and how many of them are in opposition, and in what order and at which times they pass in front of or behind one another… would be labor spent in vain. (40c)

We will… let this be the conclusion of our discussion of the nature of the visible and generated gods [θεῶν]. (40d)

Rather than being inert standards of measurement, Plato’s celestial bodies are living, thinking gods that stand guard over and produce time. And this suggests that they are not mere components of a celestial clock, but first principles of a “system of time” (to use Mohr’s language) that extends beyond themselves. So Mohr’s arguments do not refute my claim that all ordered motion derives from the order of the forms.

But how can ordered motion reflect the order of changeless forms? In the previous section, I argued that the spatial order of the cosmos could be derived from the order of the forms, even though their order itself is not spatial. Similarly, I would now like to argue that ordered motion can reflect a changeless order. And this is because even a changeless thing can contain (for lack of a better word) a sequence of change. A good example of this is a printed comic strip, which itself is unchanging. Each frame is understood to be the temporal successor of the one before, depicting how things have moved or changed between two moments in time. So while remaining changeless itself, the comic strip contains a sequence of change.

The same can be said of a dynamic hologram. When I was a student at Xavier University, there was a dynamic hologram on display in the middle of the physics building. It

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26 M. Beets, commenting on the similar attempt to compare Platonic time to a film strip, correctly points out that we should not view any particular moment of Platonic time as being analogous to a single frame “because such a frame is a static image whereas the mental present, a short segment of passing time with which it shares all characteristics, is or seems to be just as dynamic as the passing time to which it belongs.” M. G. J. Beets, From Time to Eternity: A Companion to Plato’s Phaedo (Baarn: Duna, 2003), 49. However my purpose is not to compare a particular moment to a frame, but simply to show that temporal relations can be contained in changeless things.
contained a three-dimensional image of a woman’s face (that of the holographer’s wife), and as one moved past the image, the woman appeared to blow a kiss. So the hologram contained a succession of events: the woman put her hand to her lips, she kissed her hand, she removed her hand from her lips, and lastly she blew across her hand. The hologram contained within itself perhaps as many as 30 distinct, successive moments. But nevertheless, it remained changeless in itself. The sequence of events only unfolded as one’s viewing angle changed. So the sequence of change one observed while passing the hologram was derived from an order held changelessly in the hologram itself. Similarly, the sequence of change one observes while watching a movie on DVD is contained changelessly on the DVD, and the sequence of events one finds in the narrative of a book is contained changelessly in the book. Therefore, it is possible for the ordered motion and change of the cosmos to reflect an order held changelessly within the forms.

I would now like to be more specific about the sort of order imposed on motion by the Demiurge. Unlike our contemporary conception of linear time, Platonic time is cyclic, and therefore repeatedly unfolds the same eternal patterns over and over again. The cyclic nature of time appears very early in the *Timaeus*, when we are told that human civilization has been repeatedly destroyed and reborn:

There have been, and there will continue to be, numerous disasters that have destroyed human life in many kinds of ways. (22c)

You become infants all over again, as it were, completely unfamiliar with anything there was in ancient times…. (23b)

So from the very beginning of the book, time is understood to be cyclical.

Next, at 34a, the Demiurge made the body of the cosmos and “set it turning continuously in the same place, spinning around upon itself…. And he set it to turn in a circle…. “ The
cosmos itself moves in a cyclical way. Earlier in this chapter, I discussed the circular turning of
the cosmos, as described in the Statesman. And in that dialogue, it is quite clear that the turning
of the cosmos is tied up with the flow of time. Like the Timaeus, the Statesman speaks of a
cyclic destruction of human civilization, but in the Statesman we are told that this is brought
about by “the retrogradation of the universe” (270d). When the universe begins to turn in the
opposite direction, the flow of time reverses as well:

First, the visible age of each and every creature, whatever it was, stopped increasing, and
everything that was mortal ceased moving in the direction of looking older; instead it changed
back in the opposite direction, and grew as it were younger, more tender. (270d)

If old men went back to being children, it follows that people should be put together again from
the dead, there in the earth, and come back to life; they would be following the reversal of things,
with coming-into-being turning round with it to the opposite direction…. (271b)

So in the Statesman, the flow of time is cyclical, and tied up with the turning of the cosmos,
which seems to be the same cosmic turning that we find at Timaeus 34a.

Finally, when we get to the creation of time in the Timaeus, it is made quite clear that
time is cyclic. At 38a, it is described as “time that imitates eternity and circles according to
number.” And right after that, when the celestial bodies are created to serve as first principles of
time, they are all set on orbital, circular paths (38c-d), so as to make time cyclic. In fact, the
cyclic nature of time in this passage is uncontroversial and recognized explicitly by many
interpreters, such as W. von Leyden. And the cyclic nature of Platonic time shows that it is
truly an unfolding of eternal patterns, patterns that remain changeless in themselves.

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27 “…there occur at that time cases of destruction of other living creatures on a very large scale, and humankind
itself survives only in small numbers.” (Statesman 270d)

28 von Leyden, 53.
With that in mind, we can begin to reply to the remaining difficulties raised by Aristotle and Vlastos. In the *Metaphysics*, Aristotle questions whether eternally changeless forms can be sources of motion rather than rest. We can answer that by returning to the changeless God in the *Statesman*. Though the text maintains that turning the cosmos in two different directions would violate His changelessness, turning the cosmos in only one direction does not violate his changelessness at all. Even though this turning of the cosmos brings about the aging of men and other creatures, it is a single, unchanging act in itself, and therefore compatible with the unchanging nature of God. So in the *Statesman*, the changeless God can, with a single unchanging act, unfold the cyclic sequence of time. Similarly, the forms in the *Timaeus* ought to be able to unfold their cyclic patterns as a single, unchanging act. And by doing so, they can be causes of motion, while remaining motionless themselves.

A helpful, though imperfect, analogy is the repeated unfolding of a musical sequence by a scratched and skipping vinyl record. The repeating sequence of notes is contained on the record in an unchanging way. And the record unfolds that sequence through the single, unchanging act of spinning. As it spins, it draws the needle from one note to the next, until (via the scratch) it eventually draws the needle back to the beginning of the sequence again. So despite having only a single, unchanging act, the record is able to unfold a repeating sequence over and over again. The analogy is imperfect, since the forms do not move at all, not even in a circle, and the forms unfold their sequence forever, whereas someone will eventually become annoyed by the skipping record and put an end to its skipping. But the analogy does provide us with a way of thinking about an unchanging pattern being cyclically unfolded by the unchanging act of an unchanging
thing. And that, in turn, gives us a sense of how unchanging forms can be causes of motion and change.

The remaining difficulty is the one raised by Aristotle in *On Generation and Corruption*: How can the eternal forms cause intermittently? Vlastos raised essentially the same question when he asked how eternal forms could temporally particularize themselves, acting at one time but not at another. The answer is that the forms do not image themselves in isolation from one another, but in concert, as a whole and according to eternal, cyclic patterns. The patterns themselves are unchanging, and therefore the roles played in them by the individual forms are unchanging. No form produces at one time, but not at another. All of them eternally and changelessly contribute to the patterns of the whole. And yet, as the whole changelessly unfolds its patterns in time, a form might be imaged at some points in the cycle, but not at others. So the effect of a particular form might only appear intermittently, even though the form itself does not oscillate between productivity and non-productivity, but instead changelessly contributes to the eternal patterns unfolded by the whole.

From the perspective of objects in the cosmos, this will mean that sometimes they are under the guidance of a particular form, while at other times they are let go, to borrow the language of the *Statesman*. Or to use the language of the *Phaedo*, forms will come to them, occupy them, bind them and hold them, compelling them to be what they are, until the approaches of incompatible forms cause them to perish. But from the perspective of the forms themselves, there is only a single, eternal and unchanging act, the unfolding of the cyclic patterns of time.
Let’s return to the example I gave at the beginning of the chapter. At some times an elephant is being born, while at other times, no elephant is being born. How can this be explained if the Elephant form is unchanging? Why doesn’t this require the Elephant form to oscillate between activity and inactivity? The answer is that the Elephant form does not generate elephants in isolation from the other forms, but according to cyclic patterns derived from the order of the forms as an interwoven whole. Through its relations to other forms, the Elephant form changelessly contributes to the order of this whole. And the whole changelessly unfolds that order in time. Part of that order is the eternal, cyclic pattern of elephant life, of which birth is only one part. The birth of an elephant is always preceded by 21 months of gestation, which are always preceded by the joining of elephant sperm and egg, which is always preceded by the maturation of a male and a female elephant, which is always preceded by the births of those elephants. Thus there is an eternal, cyclic pattern of elephant life, with births only occurring during the appropriate part of the cycle. The Elephant form changelessly contributes to the order of that cycle, and the forms as a whole changelessly unfold that cycle in time.

4. Summary

Aristotle suggests that changeless forms cannot be causes of motion and change. And he is joined by Vlastos in saying that eternal forms should not be able to particularize themselves in time, causing intermittently rather than continuously. My goal in this chapter was to show that these problems can be overcome, and that the eternal changelessness of the forms is compatible with their roles as active causes.
I began by citing the changeless God in the *Statesman*, in order to show that Plato did not consider active causation to be incompatible with eternal changelessness. The God in the *Statesman* has only a single, unchanging act, which is to turn the cosmos in the forward direction, and therefore He can guide the changing cosmos without undergoing change Himself. But God is also said to act intermittently, guiding the cosmos at some times, but letting it go at others. And no explanation is given as to how He can act intermittently without violating his changelessness. So the passage in the Statesman gives evidence that Plato allowed eternally changeless entities to be active causes. But it does not fully explain how Plato thought these things could be reconciled.

Next, I argued that the Demiurge’s purpose in creation was to make the cosmos an ordered whole, just as his model, the forms taken collectively, is an ordered whole. But when an ordered whole is made in the image of another ordered whole, surely the most important work of the artist is to reproduce the order of the original in the order of the image. Therefore, wherever the Demiurge introduced order, he derived it from the internal order of the forms.

I first applied this principle to the spatial order of the cosmos, showing that it could be derived from the internal order of the forms. I then applied the same principle to the temporal order of the cosmos, showing that it too could be derived from the internal order of the forms. This is possible because the sort of temporal order created by the Demiurge is cyclic and changelessly repeats eternal patterns.

And this framework made it possible to respond to the difficulties raised by Aristotle and Vlastos. First, changeless forms are able to be causes of motion and change because this effort only involves a single, unchanging act on their part – the unfolding of eternal cyclic patterns.
Secondly, we can respond to the problem of temporal particularization, or intermittent causation, as follows. Rather than causing individually, forms cause as an ordered whole, a whole which unchangingly unfolds its eternal cycles. So the effects produced by forms are intermittent, not because the individual forms cause them intermittently, but because the forms as a whole changelessly unfold themselves in cycles.
Conclusion

The purpose of this dissertation was to show that Plato held the forms to be active causes. Having come to the end, I would like to provide a brief summary of how I have argued for that conclusion and then to offer some final thoughts.

In the first chapter, I examined the path Socrates takes in the *Phaedo* as he searches for the αἰτία of coming to be and destruction. In criticizing the aetiology of the physicists, he hints at his own criteria for a satisfactory aetiology. His encounter with the work of Anaxagoras piques his interest in teleology. But when he finds that Anaxagoras has not really worked out a teleological account of the world and that he is also unable to discover such an account immediately for himself, as second best to that desired immediacy, he takes a gradual approach toward a teleological aetiology. This first leads him to his “safe answer,” in which the αἰτία of each thing is its form. But then, upon further reflection, he develops the safe answer into a “more refined answer.” In the more refined aetiology, forms bring along other forms with themselves when they enter into things. For example, the form of Fire can bring along the form of Heat, so that Fire makes things hot.

In the second chapter, I argued that the aetiology developed in the *Phaedo* is truly concerned with what we could call causes. I began by responding to some of Vlastos’ arguments that forms are only presented as logico-metaphysical αἰτίαι, not as causes. I then examined the claims of interpreters who suggest that differently gendered αἰτία words have different meanings, such that the aetiological discussion in the *Phaedo* is not concerned with causes, but with reasons or explanations. I argued that the differently gendered αἰτία words do not have different
meanings for Plato and that he employs them interchangeably. I then examined the language used in his presentations of the safe and more refined answers to show that he uses every means available to him to make it clear that his aetiological discussion is concerned with causes.

In the third chapter, I turned to the *Timaeus*. I examined the Demiurge as an active cause and then argued that he is a personification of the forms, considered as a single interwoven whole. And therefore the forms are active causes. I then went on to discuss the ontological statuses of being and coming to be. I argued that Plato’s presentation of the Receptacle suggests that particulars in the sensible world are insubstantial images of the forms. This means that the forms must be causally prior to their images in the Receptacle. And this too suggests that they are active causes. Finally, I presented a few brief pieces of evidence from beyond the *Phaedo* and *Timaeus* to support this conclusion.

In the final chapter, I confronted what I consider to be the most significant objection to my thesis. It seems that forms should not be able to act as causes of temporal things since they are eternally changeless. I responded to this objection by pointing out that the forms can be causes while remaining eternally changeless as long as they only have a single, unchanging act. And that act is the unfolding of a cyclic temporal order which is itself an image of their changeless inner relations.

Of course, this dissertation leaves many unanswered questions which deserve further exploration. For example, my analysis of the cosmology in the *Timaeus* focused on the causal role of the Demiurge but gave little attention to the causal role of the Receptacle. I discussed the Receptacle in order to show that the particulars in it are insubstantial images of the forms, and I mentioned that the Receptacle provides a sort of turbulence with which the Demiurge must
contend. But the Receptacle is the mother of the cosmos, and surely a mother does more than to confront the father with turbulence. So the Receptacle provides matter for further reflection.

What is the Receptacle’s ontology? What is its causal role? And what more can be said about the interplay between its role and that of the Demiurge?

Turning to another metaphysical issue, my analysis of the relationship between forms and their instances only addressed instances in the Receptacle, which I claimed are insubstantial images of the forms. I used this to establish that forms are causally prior to particulars in the Receptacle. But what happens when forms participate in each other, so that one form is an instance of another form? Surely it would be problematic to say that one form is an insubstantial image of another form. So what can we say about these relationships? Can one form be causally prior to another?

In the introduction, I drew attention to the fact that Plato’s theory of forms not only grounds his metaphysics, but also his epistemology, political philosophy, psychology, ethics, etc. So if we understand the forms to be active causes, rather than inert, what questions arise for our interpretation of other areas of Platonic thought?

For example, if forms cause their instances in the Receptacle, do they also cause their instances in human thought? If so, am I in control of the content of my thoughts? What are the implications for human freedom?

If the forms have a causal role in the world around us, then they are not remote and unrelated to our daily lives. Instead, we are surrounded by manifestations of their causal influence, so that even seemingly mundane things can be means of encountering the eternal
forms. How should this knowledge shape our interactions with the material world? How might it inform our conception of the good life?

What is the proper role of material considerations in physics? In the *Phaedo*, Socrates rejects a *purely* material account of causality. But I doubt that he intends to do away with material considerations of causality altogether. In the *Republic’s Allegory of the Cave*, as the prisoners gazed at the shadows on the cave wall, they were competing among themselves to see who could best identify the shadows and “who could thus best divine the future.” (516c-d)

Apparently, some of them had some degree of success, for which they were rewarded with honor and power. Similarly, those who study the cosmos in a purely material way seem to have some degree of success in describing and predicting how material things will behave. When the freed prisoner returned to the cave and his eyes had not yet adjusted to the dim lighting, he could not properly see the shadows on the cave wall, and this limited his ability to compete with the others. Even the one who has seen the truth of things cannot put his knowledge to use unless he can see the particular images before him. Similarly, we should think that even someone whose pursuit of causes has led him to the forms will be unable to put his knowledge to use before he has considered the particular material things in question. So if a proper causal account still requires material considerations, what is their proper role?

It would be wonderful if we could open Plato’s works and find clear and direct answers to these questions, or even if we could simply and immediately discover these answers for ourselves. But since we are deprived, as second best, we must busy ourselves with the difficult work of research, hypothesizing and dialogue.
Bibliography of Primary Sources


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