The Third Kind in Plato’s Timaeus

by

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Im memoriam
Kate.
Alles Vergängliche Ist nur ein Gleichnis
# Table of Contents

The Plan of Work ........................................................................................................... 8
Chapter I. A Key to the Two Tales of the Timaeus ...................................................... 13
§1. *The metaphysical poem* ......................................................................................... 13
§2. *Intelligent Craftsmanship* ..................................................................................... 18
§3. *The body of the cosmos* ....................................................................................... 21
§4. *The World Soul* .................................................................................................... 22
§5. *Time* ...................................................................................................................... 24
§6. *Necessity* ............................................................................................................... 26
§7. *Receptacle and χώρα* ......................................................................................... 30
§8. *Four Kinds of Elements* ...................................................................................... 32
Chapter II. Cosmogony and Cosmology ..................................................................... 35
§9. *Divinity and nature* ............................................................................................. 35
§10. *Nature of the world and heavens* ..................................................................... 37
§11. *Method of science* ............................................................................................. 42
§12. *Astronomy in the Academy* ............................................................................... 44
§13. *Limitations of natural science* ......................................................................... 46
Chapter III. Assimilation of the Theory of Forms to Cosmology ............................. 52
§14. *Forms and Kinds* ............................................................................................... 52
§15. *Knowledge as recollection* ............................................................................... 57
§16. *The two worlds* .................................................................................................. 60
§17. *Ramifications for cosmology* ............................................................................ 65
§18. *Ascent to truth* .................................................................................................. 68
§19. *Metaphysician’s Receptacle* ............................................................................. 77
Chapter IV. Cosmology and the Third Kind ............................................................... 88
§20. *Duplication of beginnings* ............................................................................... 88
§21. *Pre-Cosmos* ...................................................................................................... 94
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The Plan of Work

There is hardly another passage in the whole of the Platonic corpus that has been a subject of polemics as heightened and diverse as the Receptacle-passage in Plato’s Timeaus. In the Western World, the Timeaus became a sort of a cultural icon that promised a totalizing vision of the world “ordered for the best, a world where very little occurs randomly” (D. Miller 2003: 69) and was called by Paul Shorey “the chief source of cosmic emotion in European literature” (Shorey 1938: 92). It generated a prolific tradition of commentary that extended well beyond the Hellenic World into the Middle Ages and Renaissance and served as a source of inspiration to a cohort of thinkers that includes as Aristotle, Diogenes Laërtius, Cicero, Philo of Alexandria, Alcinous, Plutarch, Cicero Galen, Ficino, Johannes Kepler, Galileo, Schelling, and many others. In the modern times, Timaean cosmology was successfully assimilated into philosophy of Jacques Derrida and Julia Kristeva, who were in the ranks of thinkers who found unexpected and in many ways original use for the concept of chōra in their work. To this day, in spite of all the advancement of modern science, cosmology expounded by Plato in the Timaeus is perceived as a monument of colossal imaginativeness. Plato rightfully deserves accolades for matching the form and the content of the Timaeus; also, for pioneering a genre of cosmology. There is no denying that Plato’s propositions concerning the Third kind, or “the receptacle and wet-nurse of all becoming,” as Plato tellingly describes it, are one of the key aspects of the Timaeus that unwitheringly keeps bringing thinkers back to consulting the text. This study purports to meet a steadily growing demand for a more nuanced understanding of the Third kind in Plato’s Timaeus on a comprehensive level.
A problem central to this work in particular is that of the metaphysical separation. Do the eternal intelligible paradigms and the generated sensible copies that Plato discusses in the dialogue work separately from one another? Although Plato does not directly mention this, scholars have commonly recognized that the fundamental copy-structure of things that he attributes to the physical world is a restaging of the dichotomy of being and coming-to-be that the Theory of Forms is best known for. The Theory of Forms speaks of individual things on earth as in heavens as “images,” merely imitations of the true reality of Forms. Granting that is so, should we think of the paradigm and copy in the image of the paradigm as just two or many? Since there is in each case only one paradigm, how should we imagine the intelligible world and its sensible counterpart being organized, given that the copies are a multitude? What structure does this world have? How does it come to pass that things in it are copies of the paradigms? Furthermore, what road does the coming-to-be as such travel on the way to instantiation of imitations of the Forms? That is, how do the corporeal sense-perceptible objects that roughly correspond to what might be called bodies participate (methexis) in being? Last, but not least, Does Plato’s Timaeus provide a solution to the classical problem of how can individual things generated in the physical world be imitations of the true reality?

These are the questions, then, that I will try to break down into more basic ones like what is a Form, what is an “image,” and what in the world is supposed to be doing the work of distinguishing the “image” and the Forms? In the course of this study, I will gradually home in on the Third kind in Plato’s Timaeus as a helpful way of thinking about these problems. Hopefully, it will allow us to make progress in getting past difficulties that probably anyone who had experience of
what it means to read Plato’s dialogues at least once just could not help thinking about.

This study is basically divided into three parts. The first part is a straightforward exposition and introduction that a dialogue like the *Timaeus* simply could not do without. There are so many things that Plato is talking about in the *Timaeus* that people sometimes complaint that it is very easy to get lost in it. To avoid that, I provide right at the outset an adequate summary of the main themes that I will be coming back to in the course of this study again and again. Coming right after it is the Chapter II on the historical background and perhaps even circumstances in the life of Plato that made him write the *Timaeus*. This chapter also puts on the display some of the most distinctive features of the Platonic cosmological model and how they are tied up with Plato’s larger philosophical project. However, without a discussion of the Third kind an assessment of Platonic cosmology cannot be complete.

Accordingly, the part two offers a contextualization of the Platonic cosmology and Third kind together. Chapter III is a continuation of Chapter II in that it too looks at the *Timaeus* as an organic development of Plato’s thought. In Chapter III, I establish the foundation of the metaphysics of the *Timaeus* and show that Plato’s two-worlds ontological model associated with the Theory of Forms as developed by him in the early and middle dialogues has a limited scope of application in the *Timaeus*. Something changes in Plato’s metaphysics between the late (the *Timaeus* is considered to be a late dialogue, written after *Parmenides*, but before *Sophist*) and early/middle dialogues, but what exactly it is hard to say.

At the end of Chapter III, I draw a sketch of the “ontological interpretation” of the Receptacle that I take to be a naïve, or not enough sophisticated, attempt at
unriddling Plato. In the following Chapter IV, I present an alternative account of the Receptacle, emphasizing in my analysis close reading of the text, which in our case means taking Plato’s cosmology seriously. I put on the table all the “natural evidence” we have for the existence of the Receptacle and locate its origins in the problem involving the movement of “traces” in the pre-cosmos.

The third and final part comes last because it builds on what the analysis of the Receptacle in this study revealed are the limits of intelligibility of the third kind of thing and its suspended status in the story Plato is telling us. Even granting, on favorable reading, that the Receptacle exists, just what kind of thing we after Plato should think it is remains as unclear as ever. Hence, the third part is centered around the this-such passage in which Plato professedly explains just what the Receptacle is supposed to be doing and what are its functions. However, his language can be sometimes as obscure as the subject of his speech. For that reason, I describe and analyze the this-such passage separately. It takes Chapter V and Chapter VI, respectively. I will argue that whatever knowledge we have of the Receptacle comes from its participation in the cycle of the transformation of the elements. In turn, nature of the elements cannot be adequately grasped by us without first postulating something like the Receptacle. In this twin entangling lies the core of Plato’s thought on the Third kind. The last Chapter VII will demonstrate how Plato arrives at the notion of the Third kind by separating it out of the second kind. Ultimately, the cosmological Third kind is called to explain how the elements came to be, because the elements do have a generation, as Plato argues, and all things coming to be participate in the intelligible par excellence.

If my interpretation is correct and in the Timaeus Plato still believes in methexis then we have all the reasons to think that the cosmology is essentially
Plato’s way of lifting the participation in the intelligible from the conditions of “imitation” of Forms and extending the *methexis* to include the elements which somehow escaped the two-worlds theory. I do not claim that the number of the mysteries surrounding Plato’s Theory of Forms has thereby decreased by a large number, but I hope that this study will deepen our understanding of the “metaphysical break” connected with the metaphysical separation in Plato’s philosophy and open up new vistas for some high-level scholarship in this field.
Chapter I. A Key to the Two Tales of the Timaeus


§1. The metaphysical proem.

For many years, Timaeus has unjustly been treated as accessible to but to a small number of people who were able to decipher its meaning. The current thesis is born out of the sense of wanting to reverse this situation and make this dialogue known to a wider public, while maintaining the highest standards of depth and breadth of the analysis. It requires from us adherence to standards of rigor in remaining respectful of Plato's precise words. Because Plato’s Timaeus is an extremely difficult text to understand I suggest that we at first take a look at what are the main themes that Plato discusses in this dialogue and which I will have a chance to address one by one in more detail later on.

The Timaeus claims to follow up the Republic (see Tim. 17C1 ff) as the first part of a trilogy consisting of lectures by Timaeus of Locris, Critias, and, presumably, Hermocrates (see Cornford 1997:6-8). Timaeus as knowledgeable in astronomy and natural science, is to discourse on the generation of the world and end his account with the nature of man (Tim. 27A3-6) (D. Miller 2003: 41).

The first thing Timaeus does is to invoke the gods to grant him a safe passage through the dangerous waters of discourse that he is about to produce. Then, he proceeds to enumerate metaphysical assumptions on which his account rests. Timaeus reflects on the identity of the object such as the one he intends to discuss in his speech by suggesting, 27D6-28A1, that there are two distinct and distinctive kinds (28A9, 28C1; cf. 39E-48A; 48E) of things.\(^1\) There is, so to speak, that which

\(^1\) The original text reads: “…τὸ τὸ ὅν ἀεί, γένεσιν δὲ οὐκ ἔχον, καὶ τι τὸ γιγνόμενον [ἀει], ὃν δὲ οὐδέποτε.”
has always existed (to on aei) and the other that does not so exist, but is rather seen to be coming to be and passing away non-stop (ti to gignomenon [aei]). So, Plato says: “what is that which everlastinglies is, and has no beginning, and what is that which comes into being, and never is?” Plato’s commentators generally agree that this seems to be an obvious reference to the two-worlds model of the Theory of Forms that is developed in the middle-period dialogues, most notably Phaedo and Republic. In the Republic, Plato demarcates, on the one hand, the world of the selfsame being (Forms), in which γένεσις (taken as either “process” or “beginning” or both) plays no part, and, on the other, the world of space-time, “the intermediate” between “what is” and “what is-not” (475E9 ff.), whose prime attribute is γένεσις. Though it may be enticing to think of the kinds of the Timaeus as just these two worlds, considering what Plato says next, it seems more

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2 Here, I follow Robinson’s and Zeyl’s translations in omitting aei at 28A1.
3 Cornford noted long ago that if we take Plato to be restating word-for-word the two worlds theory in the Timaeus then the statement at 28B9 that the whole world (διὰ πᾶς οὐράνιος) “has come to be” would be in formal contradiction. Reading the second aei, Cornford and many commentators after him construe the passage to support the view that the reference is indeed to the material world as ‘everlastingly in the process of change.’ It forces him to mistranslate τὸ γένος (28C3) to suit the supposed content of the premise at 28A1 as “that which becomes,” rather than ‘that which came into being,’ and to change Plato’s word choice on a number of occasions later in the text. It is one thing to claim that Plato says X, but means Y, but it’s not the same as to mistranslate Plato’s words to suggest that Plato didn’t even say X in the first place. There is no pressing urgency to construct the passage in Cornford’s manner to suggest that Plato started his philosophical discussion with a premise that is formally contradicted by what follows. As it has been pointed out by Robinson, it is not evident that the two kinds of the Timaeus are the same as the two worlds of Republic and Phaedo. (“This is not, of course, to suggest that the doctrine of the world of space-time as process has been abandoned; simply that it is not relevant to Plato’s present argument.’) He claims that the whole business of 28C-D is to distinguish “things that come into existence from things that do not, and then to see into which of the two classes the universe falls” (Robinson 2004: 1). He says that, in the last analysis, whether we read or not the adjective aei as a qualification of to gignomenon makes all the difference. If we retain aei in that case, then the suggestion is that Plato’s kinds denote classes of ‘to on aei’ and ‘to gignomenon aei.’ But once we see that aei is not Plato’s at all, then together with the revealing phrase ‘coming into being and perishing’ (28A3; cf. 52A6-7) it forms the clinching piece of evidence that in the discussion of the two kinds it is the individual members of classes of to on aei and to gignomenon that are in question, rather than classes themselves. For
plausible to me that what he’s really after in this passage is to compare and contrast the attributes possessed by each kind that would enable us to keep things that have them apart and separate. It is understandable why Plato would want to do this, considering that he is going to apply the schema of classification he devises to say the world as a whole has come to be (28B9) and, later, came into being (28C3). For the sake of convenience and clarity of the exposition, I provide a table of the attributes of the two Kinds, as they appear in the Timaeus, borrowed from D. Miller 2003, 42 with modifications inserted by me below:

<table>
<thead>
<tr>
<th>Kind I</th>
<th>Kind II</th>
</tr>
</thead>
<tbody>
<tr>
<td>always is</td>
<td>comes into being</td>
</tr>
<tr>
<td>never is</td>
<td>never is</td>
</tr>
<tr>
<td>always the same</td>
<td>generated and perishable</td>
</tr>
<tr>
<td>apprehended by intelligence</td>
<td>apprehended by opinion</td>
</tr>
<tr>
<td>with reason</td>
<td>with perception</td>
</tr>
<tr>
<td>uncaused</td>
<td>caused</td>
</tr>
<tr>
<td>model</td>
<td>copy</td>
</tr>
<tr>
<td>invisible</td>
<td>visible</td>
</tr>
<tr>
<td>unchanging</td>
<td>changing</td>
</tr>
</tbody>
</table>

Timaeus continues the metaphysical proem by declaring that, 28A1-4, primarily because they are unchanging, objects which fall in the former category, i.e., Forms, are grasped by thinking with a logos, whereas everything else that’s generated and perishable is apprehended through perception together with opinion which is without logos. Then, he asserts that, 28A4-6, in every case of coming to be there is a cause by the “agency” of which this or that may come to be.

Robinson rightly, in my opinion, argues that “there is no suggestion in the Timaeus that the world of space-time itself is subject to cyclical genesis and destruction” (Robinson 2004: 2). He continues by saying that, “Once the initial premise of 27D6-28A4 is understood in terms of Form (without a beginning) and sense-object (with a beginning) Plato’s argument is readily intelligible” (Robinson 2004: 2). D. Miller echoes Robinson’s analysis and suggests that the distinction drawn by Timaeus is that “between two kinds of things that stand in a specified relation. Timaeus makes this distinction by referring to the diverse attributes possessed by each kind” (D. Miller 2003: 41).
Becoming in general, so to speak, must derive from something which causes it, supposing that the being of Forms is, in contrast, uncaused (D. Miller 2003: 41-42; Gadamer 1980: 162). Alternatively, following Robinson’s translation, we can phrase Plato as saying here that things that have a beginning (i.e., sense-objects) do so thanks to some causal agent. Immediately in the next sentence, 28A6-B4, Plato gives to this cause the name of “the craftsman” (δημιουργός) from the activity of which there always results something that is beautiful if only and if he made it on the basis of an eternal and changeless model. Whereas if he were guided in his envisioning of what is to be made by what comes to be, but never really is, then the product would similarly be formless and lacking in constancy.

Taking this into consideration, Timaeus concludes, or, better to say, chooses as a starting point of his discourse proper, that regarding the physical world as a whole (ὁ πᾶς οὐρανός), or world order (κόσμος), one must say that it is not beginningless and eternal, but rather that it is describable as being in the present state of having come to be (28B9). He explains that it is so on the

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4 Taylor comments that Plato makes a transition from a proposition of the form “A is caused” to “This cause is a craftsman” primarily “because the principle of causality, as [Plato] understands it, is the principle of agency that he makes Timaeus go on at once to illustrate it by reference to the activity of mechanic or craftsman” (Taylor 1928: 64).

5 Given Plato’s historical period I am assuming he had a male deity in mind. However, I pray the reader to replace any male reference with the opposite gender at their own will, leisure, or even to conceive a gender neutral deity; changing the gender of the demiurge will change none of the terms of our discussion.

6 “Truly existing being is that which may be comprehended by intelligence in conjunction with reason. That which is generated is to be apprehended by opinion in conjunction with irrational sense. Every thing generated, is generated by a cause. That which does not derive its subsistence from a cause, is not generated. That of which the paradigm is eternal being, is necessarily beautiful” (Proclus, In Platonis Timaeum Commentaria, 1.251).

7 Compare Gorgias 508A: “Yes, Callicles, wise men claim that partnership and friendship, orderliness, self-control, and justice hold together heaven and earth, and gods and men, and that is why they call this universe a world order, my friend, and not an undisciplined world-disorder.”

8 According to Cornford, Proclus takes Plato’s intention here to be an establishment of contrast between the undivided and eternal being of the intelligible (world) that’s not in
following grounds: a) things which are visible and tangible are perceptible; b)
cosmos is visible and it has a body; c) things that are the objects of opinion and
perceived through the senses come to be; b) therefore, the world itself falls in the
category of objects\(^9\) that come to be (28C1-4). The upshot of this is that the
kosmos like all other sense-objects came into being thanks to a causal agent
(28C5).

Now Plato tells us that the basic principle according to which one must
judge the manner of presentation in the *Timaeus* at 28C5-8: “Now to find the
maker and father of this All (τοῦ παντός) is hard enough, and even if I succeeded,
to declare him to everyone is impossible.” Based upon his view that the universe
deserves being called nothing less than ‘the most beautiful of all things that have
come to be,’ Plato makes an argument to the effect that the paradigm
(παράδειγμα) of the universe is the eternal being, and therefore the father of this
All is good, because if the universe were an imitation of a sensible image it would
be something thoroughly “imperfect and unruly”\(^{10}\) for that reason. Plato has thus

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\(^9\) Scholars have recognized that Plato’s identification of cosmos as one of the sense-
objects is deeply problematic from a philosophical point of view: ‘The weakness of any
interpretation of our passage in terms of the physically real’s invariable characterization
as being subject to some sort of Whiteheadian ‘process’ is that it offers no basis for
discussion of the feature shared, on *Timaeus*’s account, by the universe as (to his mind) a
sense object and every sense object comprising it in the specific respect that each is by
definition characterized as having come into being as the thing that it is; and, for that
matter, as being destined to go out of being as the thing that it is (as *Timaeus* makes clear
at 41-B, the fact that the universe will not so pass out of being is purely the result of
divine fiat; in any normal scheme of things it would so pass out of being). All sense of a
validly constructed deductive syllogism ending in the claim ‘gegonen’ is, on this
interpretation, loose, despite the fact that the sentence, as so interpreted, is in itself a
perfectly accurate statement of a feature of Platonic metaphysics; this world is indeed a
world of flux’ (Robinson 2004: 12).

\(^{10}\) F. W. J. Schelling, *Timaeus*. (1794), ed. Hartmut Buchner (Stuttgart-Bad Cannstatt:
established that the world came to be by the best of all causes: “it is a work of

craft, modelled after that which is changeless and is grasped by a rational account,

that is, by wisdom” (29A7-9).

In the closing of the metaphysical proem, Plato declares that “it is all-

important that the beginning of everything should be according to nature” (29B;
cf. 34C). That is to say, how much things can be treated by us in a scientific and

exact account depends on the degree of truth that the nature of things themselves

admits. Plato puts on the one side the subject’s intelligibility that we can reach in

the accounts of what is always stable and fixed and on the other merely probable

accounts that we can make about things that are a copy and likeness of something

else (29C). This principle is expressed in words “As being is to becoming, so is

truth to belief.” For that reason, Timaeus’s story receives from Plato the status of a

likely story (εἰκός μύθος). That is not to say, that it is unlikely that Timaeus’s

account is accurate, but rather that it is comparable to other stories people tell

about cosmos and has at least as much plausibility as found in any of them, if not

actually excelling them in some respects.

§2. Intelligent Craftsmanship.

The two ways in which things can be said to exist being firmly established and
distinguished, Plato is now ready address the account of the genesis of cosmos
directly in the Timaeus. He says that when the Demiurge had to decide what the

cosmos to come would be an image of, he, being a fair and ungrudging god,
wanted to make it most like himself (29E8), that is, one and divine in nature (31A-

Frommann-Holzboog, 1994.)
B; cf. 34B7, 37E8). Plato attributes to the god of the ‘myth’ of the *Timaeus* about the genesis of cosmos unlimited powers. God’s omnipotence in the end enabled the world to benefit from being produced as much as it was possible in the nature of a particular kind of thing (i.e., sense-object) into which it was being made (30B8-9). Plato emphasizes that there is nothing that the Demiurge could make otherwise to make the world as a whole a better place (30A9-B1), implying that the world suffered from his hands only what was instrumental to its excellence.

Plato’s argument runs like a series of conjectures about “what the Demiurge had to do” to see to it that the world as a whole is in all respects complete and perfect. In this, the artisan god as a divine Craftsman is driven by a strong desire to shape a product that is remarkable for its beauty, of course, but also for the purpose for which it’s created. The Demiurge’s desire to produce something beautiful is reinforced by the desire to be like a father to the world. For example, Plato argues that the Demiurge created life in the world, but “nothing that is a likeness of anything incomplete could ever turn out beautiful” (30C6-7). As a consequence, the Demiurge made the world into the likeness of Form Eternal Living Creature which “comprehends within itself” everything that is alive as its parts (30E9). That is to say, the Form Eternal Living Creature was the eternal paradigm that encompasses all intelligible living beings of which the cosmos was supposed to become a generated sensible copy containing all visible things.\(^\text{11}\)

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\(^{11}\) Sallis, 1990, 60: “Yet, even though both paradigm and image are distinctively all-inclusive, they are inclusive in decisively different ways. The difference has primarily to do with place; that is, what distinguishes the kind of inclusion characteristic of the visible cosmos is that, unlike intelligible inclusion, it holds together in an extended place beings that with respect to one another are in different places within this comprehensive place. It is as if in the transition from intelligible to visible something like place came into play, letting things be set apart as they are gathered into the comprehensive visible cosmos. As the χώρα, which seems like place, will prove always to have come into play in the very opening of the difference.”
that end, when the Demiurge finished making heavens he turned to the subservient gods (41B-D), who stand second in the rank to him in the hierarchy of creation, and told them to make the world most complete by filling it with all sorts of living beings dwelling on earth, in water, and in the skies (40A), including humans, in accordance with “the laws of nature” (see Chapter III).

Freed from the natural cycle of generation and perishing through which everything living has its being, the greatest living being of all that the Demiurge produced first was the cosmos\(^\text{12}\) (30C3-31A2). I will explain what Plato means by the word ‘cosmos’ and its relation to the world as a whole shortly, but for now let me stress what I think is Plato’s intention in claiming that the universe is alive. It is evidently the case that if there is no coordination between what each of the “organs” of a living body does and all of them continue working separately from one another then a thing cannot be properly said to be alive. Accordingly, the first thing that the Demiurge did, Plato tells us, was to bring the world out of the state of disorder (30A-B), which by itself suggests that to the extent that it is in general

\(^{12}\) Nietzsche’s project of reversal or inversion of “Platonism” is brought to bear in specific on this identification of the κόσμος with a living being: “Let us be on guard against thinking that the world is a living being. Where should it expand? On what should it feed? How could it grow and multiply? We know more or less what the organic is; and we should not reinterpret the exceedingly derivative, late, rare, accidental, which we perceive only on the crust of the earth, and make of it something essential, universal, eternal, which is what those do who call the universe an organism. This nauseates me… Let us be on guard against positing generally and everywhere anything as perfect as the cyclical movements of our neighboring stars; even a glance into the Milky Way raises doubts whether there are not far coarser and more contradictory movements there, as well as stars with eternally linear paths, etc. The astral order in which we live is an exception; this order and the considerable duration that depends on it have again made possible the exception of exceptions: the formation of the organic. The total character of the world, however, is in all eternity chaos…” (Die fröhliche Wissenschaft, in vol. V/2 of Werke: Kritische Gesamtausgabe, ed. G. Colli and M. Montinari [Berlin: de Gruyter, 1973], 145–46 [§109]). As Sallis remarks, ‘It should not go unremarked that the very questions Nietzsche raises in this passage figure prominently in the Timaeus. The question of expansion comes into play in Timaeus’ discourse on the cosmos. Timaeus will also undertake to show that the cosmos is one and hence incapable of multiplying… In one account Timaeus will tell — though not without releasing a bit of comedy — just what the cosmos feeds on, namely, its own excrement’ (Sallis 1990: 58).
a good effect the Demiurge indeed was by nature the best of all causes. Plato supports this claim by suggesting that the Demiurge employs reason in his work and always knows what is the right way for each thing to come out best. Plato says that “the god [i.e., the Demiurge] reasoned and concluded” that the creatures devoid of intelligence “in the realm of things naturally visible” are by far less fair than their intelligent counterparts (30B1-5). Accordingly, the Demiurge made the soul, because he realized that “it is impossible for anything to come to posses intelligence apart from the soul… Guided by this reasoning, he [i.e., the Demiurge] put intelligence in soul, and soul in body” (30B5-7) in order to construct a living and intelligent organic whole that is in every way complete and perfect as its model.

§3. The body of the cosmos.
Plato says that the Demiurge beget the body of the universe by taking fire (for visibility) and earth (for tangibility) and interposing between them water and air (for depth of the field of perception). By putting these four elements together he made them proportionate to one another so that they “bestowed friendship” upon the world (31E9-31C6). Again, Plato emphasizes that the Demiurge completely used the whole of the available amounts of the four elements and didn't let anything remain “outside” of the world (32C7-33A7). As Plato explains, this allowed him to make the universe “free of old age and disease” so much that it became deathless (32A7-B4), its parts being in unity with itself and bound together for all time to come by the bonds that are indissoluble by anyone except the Demiurge (31E5-6). Cosmos thus formed is truly “a blessed god” (34B7) because god the father thought that it is best that it would never be in need of anything and be self-sufficient (33D1-2). As Plato describes it, the shape of the
world is that of the sphere “smooth round its finish” (33B) because there is no earth on which to walk with legs, no air to inhale with nose, and no one to who it has to talk with mouth, and so on (33C-34A). The demiurge set the soul in the center of its body, extending it throughout the whole body and coverings its borders, and made it to turn in the circle (34B1-4). The excellence and uniformity of this movement Plato suggests is exactly what allows it always to be in a cheerful mood and thus to keep company with itself (34B4-6). Therefore, the universe, freed from six other motions that are (left and right, up and down, back and forth), turns continuously in the same place (34A) in the imitation the selfsameness of its intelligible paradigm.

§4. The World Soul.

Although the generation of the body comes first in our exposition, Timaeus remarks that it didn’t have the same place in the order in which the world was created. As John Sallis points out, Timaeus’s discourse started out by treating of cosmos as it would have been — had it come to be at all — when it was not yet a living being, but only a body; or, as “the corpse it would become after, if it were to die” (Sallis 1990: 60). Now it has come time to acknowledge this fact and to rectify a confusion it might have planted into the account of the Intelligent Craftsmanship. Timaeus asserts that the Demiurge would not have allowed the elder to be ruled by the younger and that it is not the case that the Demiurge devised the body to be senior and the soul junior (34C). The discussion on the generation of the World Soul and time (34B-37C) has rightfully been recognized to contain the most cryptic part of the dialogue. However, because of importance of the mechanism of the World Soul to the claims I make in chapter IV, I cannot skip it. I leave it to the reader to refer to the literature dealing specifically with
what Plato’s argument is here\textsuperscript{13} for a more nuanced understanding and present Sallis's knowledgeable summary of the discussion of the World Soul below:

Timaeus tells how the god took the harmoniously articulated band and formed it into the cosmic soul. First of all, he split it lengthwise. Then, joining the two bands at a point, he bent each of them around to the opposite point so as to form them into two intersecting circles. Each he set revolving uniformly; one band he made inner, the other outer. The outer revolution he called that of the same, the inner that of the different. The revolution of the same was made to go toward the right and to be horizontal; that of the different was made to go toward the left and was tilted so as to be at an oblique angle with the outer band. The inner revolution, that of the different, the god split in six places so as to form seven unequal circles, arranging these according to the double and triple intervals. Three of these were made to revolve at equal speeds, the other four at speeds equal neither to the other three nor to each other. The revolution of the same corresponds to the sidereal equator (Sallis 1990: 72).

The Demiurge gave to the motion of Sameness primacy, leaving it undivided. But he did divide the motion of Difference in six parts, in effect of which it has seven unequal circles. He made these circles to move in opposite directions: three of them moves with equal speeds, whereas the others with unequal, but always in proportion. Now the circles Sallis mentions are really the orbits of the heavenly bodies: the first three moving at equal speeds correspond to the Sun, Venus and Mercury, while the other four moving at unequal speeds correspond the Moon, Mars, Jupiter and Saturn (36C-D). It is in this way, therefore, that the demiurge placed the soul in the body of the universe: he diffused the soul from its center to its extremities in every direction with the invisible soul enveloping the visible body. Then, the World Soul began to rotate and began its eternal and rational life. For by virtue of being composed the intermediate mixtures of Sameness, Difference and Essence (\textit{ousia}) all put

together by the Demiurge in the right proportions, the World Soul unerringly pronounces its judgements on the sameness or difference of every object it meets (37B-C): when it is a sensible object, the inner circles of the Different transmits its movement to the soul, where opinions arise, but when it is an object of reasoning that comes around, then the circle of the Same turns round and produces true knowledge in the soul.

§5. Time.

As Plato shows, his discussion of the World Soul is brought to bear specifically on the identity of the complex formed by the whole of the fixed stars and the planets along with the Sun and time (37C-39D). Plato says that the time is the number according to which the Demiurge imparted to the movements of heaven a sense of measure and order. Time is counted motion. As he puts it, “was” and “will be” are the parts of the generated time that came to be as “a moving image of eternity” (37D6); merely ‘image’ because of the intelligible world nothing can be said except that it ‘always is.’ However, what exactly is supposed to be the meaning of all of this is just as notorious for its difficulty as the passage on the creation of the World Soul. The matters are all the more complicated by the fact that the formula by which time is claimed to be the moving image of eternity is not mentioned in the literature prior to prior to Middle Platonism (Sallis 1990:78), which suggests that here we are actually dealing with two theories both attributed to Plato: one in which time is the moving image of eternity, and the other in which it is something else.

Again, here, I cannot do the whole justice to Plato’s understanding of the part played by time in the universe because I am not ready to make any claims about the reception of the discussion of time in the Timaeus by Platonists as well
as Neo-Platonists. So I refer anyone who are interested to learn about this topic to form an opinion about what Plato really thought about time to a seminal discussion of Plato’s theory of time in Brague's Du Temps chez Platon et Aristotle. Evidently, Plato’s discussion of the generation time deserves a separate treatise, but, as far as I am concerned, the description of time as the moving image of eternity that appears in most of the modern translations of the text makes all the difference to my interpretation. I understand by this the fact that time, whatever a kind of phenomenon it is that is being distinctively perceived by us under that name, is part and parcel of the goal-directed activity of the artisan god, namely, making kosmos as much as possible a fair representation of its intelligible counterpart, i.e., the paradeigmata.

I concur with Sallis’s interpretation who argues that the creation of time corresponds to the creation of starry heaven (ουρανός). Sallis suggests that in this passage Plato plays on the ordinary sense of the word heaven (ουρανός) that refers to that part of the world, or the universe (κόσμος), which is associated with the heavenly vault, the heaven as distinct from the earth, and so on. At this stage, what the Demiurge does is to take over the constructed soul and body of the world, especially its fiery part, to form heavenly bodies and to place them in the orbits that have already been determined by the soul of kosmos with its invisible circles of the Same and Different, and, therefore, to set them moving in these orderly movements (38E-39B). Thus, the shaping of heaven and setting it in order, fundamentally, are part of one and the same act of god. Here the ordered movement is decisive: that Timaeus lets the sense of οὐρανός expand so as to coincide with that of κόσμος and make it synonymous with what is already expressed in word κόσμος: “what makes the cosmos a cosmos is that its
movements are ordered” (Sallis 1990:80). Though, in other places later in the text Plato again uses οὐρανός in the restricted sense (39d, 47a–b), as “the region in which the movements of the heavenly bodies occur, the starry heaven” (Sallis 1990:79)


Plato specifies that κόσμος is the ‘sanctuary of the everlasting gods’ (37C8-9) and, overall, heavenly bodies are viewed as being divine living things (41B5-8) and a race of gods (39E9) that took over the creation of the universe after the Demiurge made them. The heavenly bodies are divine and move in their various orbits to serve as markers of time: the fixed stars to mark a day/night, the moon to mark the (lunar) month and the sun to mark the year. The rest of Timaeus’s myth considers the creation of the soul of mortal living beings, including humans, from the unused parts of the World Soul and the generation of the human body part and by part and in particular the organs of vision (41D-46A). In these lines, Plato illustrates how, fundamentally, ‘the plan of the divine Intelligence is brought into action as it causes things to be’ (44D). For example, “to keep the head from rolling around on the ground without any way of getting up over its various high spots and out of the low, [gods] gave it the body as a vehicle to make its way easy” (44E1-3). Similarly, gods imparted to the body the front and back sides by placing the eyes on the same side with the rest of human face and ennobling the appearance of this part of the body more than the opposite side.

Gradually Plato moves to the account of the formation of the organs of vision, at which point he tries to present the cause of seeing things (45B-46C). He argues that they are constructed in such way as to let a pure, non-burning kind of fire within the body to shoot forth and, upon coalescing with the external daylight,
to distribute throughout the whole soul motions caused by collision of the visual stream with the physical things that lie on its path (Broadie 2012: 173). Timaeus even collects evidence for his theory of the physics of vision in order to defend it by showing how it explains why we cannot see in the dark, the dream-images, and various phenomena of mirror-images.

However, Timaeus soon realizes that he is not at all satisfied with the cause of vision for which he has so far been advocating in his account. Moreover so, he says that all the things that he has just mentioned (i.e., fire, the rays of light, etc.) are not more than auxiliary causal factors (sunaitia, 46D1)\(^\text{14}\) employed by the divine Intelligence to serve the project of the best. Because of this, Timaeus interrupts his account to make it known that he was wrong in thinking that the physical theory of the visual fire gives the real cause or the primary explanation (aitia, 45B4) of seeing things with our eyes. Most thinkers, Plato claims, attribute, mistakenly attribute the causal agency in the fullest sense to things like fire, water, etc., factors that work through reactions of heating and cooling, dilating, and condensing (Broadie 2012: 174). The fire that make it possible to perceive the external objects through the organs of vision is just one of such factors.

This forces Plato now to acknowledge that in vision as well as with everything else there are two types of causes at work. Firstly, because fire, etc. are visible and devoid of soul, which is invisible, and, therefore, strictly non-

\(^{14}\) Cf. Phaedo. 46C-D. The causes of both the aitia and sunaitia classes makes their appearance in the Timaeus. For example, at 73E-74B Plato says that the gods made our bones to protect the bone marrow (aitia), while the hardness of the bone can serve as a sunaition for the protection of the valuable material of the marrow. In general, “… among those things which bring about an effect in the strict sense, some do bring it about by themselves, namely the perfect causes, whereas others only bring it about in conjunction and cooperation with other cause; these are the sunaitia” (Frede 2013: 140).
intelligent\textsuperscript{15} and, secondly, because only the intelligent causes are to be treated as primary, all causes that fall in the category of things ‘that are moved by others and that set still others in motion by necessity’ (46E) are secondary in nature. Plato makes Timaeus say that we should not at any cost collapse the fundamental distinction between two types of causes, though he promises that the secondary causes are going to be treated equally well in his account next (Broadie 2012:174).

As it is evident, it turns out that to make up for the lapse in our understanding of the causes of natural processes commonly ascribed to the physical properties of the elements (47B), we have to delve into the fabrication of the alliance of Reason (Nous) and Necessity (Ananke).\textsuperscript{16} He pictures it in the metaphor of the persuasio of Necessity by Reason (48A). Whereas before Timaeus was primarily preoccupied with reconstructing what the Demiurge had sovereignly done to build the world on the paradigm of the eternal being, now Timaeus sets himself a new objective. It is to propose a resolution of the conflicts that Timaeus’s preferred mode of expression could by now generate in people.

\textsuperscript{15} Bad argument. It shows that the elements are not souls, but not that they are soul-less. We will have a chance to discuss it in more detail in chapter IV.

\textsuperscript{16} Many suggestions have been made as to what Necessity is. For example, Grote, 1888, 238, suggested it is “random, indeterminate, chaotic, pre-existent, spontaneity of movement or force.” Archer Hind, 1888, 166 suggests that “necessity” refers to the “sum total of the physical laws which govern the material universe,” and by “physical laws” Archer-Hind means the “proper impulse” of “nature’s forces” as illustrated that hay will burn “by necessity” when in contact with fire. Taylor, 1928, 301, think that “necessity” is “those conjunctions for which we can see no justification in the form of a valuable result”; it is “brute fact.” Somewhat along the line of Archer-Hind, Strange 1985, 34, suggests that “reason persuades Necessity by producing the proper ordering of the mechanical causes to give the best result.” Cornford, 1937, 162-77, rejecting the view of Archer-Hind, argues that it is “the chaotic disorderly” in the world, for the world “contains motions and active powers which are not instituted by the divine Reason and perpetually producing undesirable effect” (176). Morrow, 1950 argues, apparently against Cornford, that “necessity” is the “materials” of which things consists “and their inherent powers” (152) which need not be chaotic since Intelligence brings out what lies within things (161). Finally, for Gadamer, 1980, 188 “the necessary is that without which what we want to happen would not be possible…” I will return to a discussion of Necessity in a timely fashion in Chapters IV and VI.
who are not inclined to accept the premise that the possibility of objectively knowing something about the physical world as a whole is predicated on “the constant noetic order behind the surface” (Gadamer 1980: 161).

The hitherto told story is not by itself sufficient and must extend to an account of “contributing causes” (συναίτια). The discourse must provide an account of the various physical structures that are necessary for and support the achievement of the purposes of Intellect. The properties possessed by these various structures are determined by their constitutions as a matter of “Necessity,” and it is not open to the Craftsman to preserve the structures and change or eliminate the properties. The properties allow (or disallow) certain processes desirable to the Craftsman, and to the extent that Intellect achieves its desiderata, it succeeds in “persuading” Necessity (48a2–5). It is the role of the second major part of the discourse to set forth these contributing causes.17

At the same time, Plato declines to the first “principles” of everything18 so long as the “present manner of exposition” is confined to things of which we can never have complete knowledge (48B-C). Thus, he addresses his audience, informing us that the current point in the likely story suits the occasion to change gears and state the account of the origins of cosmos again, but in a different way. However, seeing what great difficulties this task presents to him, Timaeus still hesitates about how much people should count on him to make a precise

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18 As Broadie observes, “The contrast at 48C2 ff. is between principles relevant for cosmology and principles of all things. Then, at 53D4-7 Timaeus contrasts the cosmologically relevant basic triangle with ‘higher principles known <only> to God and to that man who is dear to God.’ Whether or not these latter principles are ‘of all things,’ they are presumably treated by a more rigorous standard than the eikos, and in themselves shed no special light on cosmology” (Broadie 2012: 185)
declaration of the state of affairs. So, after he has set the Intelligent Cause apart from the Necessity, he says:

The new starting point in my account of the universe needs to be more complex than the earlier one. Then we distinguished two kinds, but now we must specify a third, one of a different sort. The earlier two sufficed for our previous account: 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? (48E-49A)

§7. Receptacle and χώρα.

The Necessity, Space, and the Wandering Cause are the items of Timaean cosmology that in one way or another are the factors of generation that go beyond the manufacturing of the copies of the paradigms by the Demiurge and represent different aspects of the Third kind. To discuss these is, says Timaeus, necessary, “the discourse on what belongs to the order of necessity thus being itself necessitated” (Sallis 1990: 100). Right after he introduces it, Plato throws a clue as to what nature of the Third kind might be: “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” Although Plato admonishes us against calling the third kind of thing by names other than χώρα, throughout the text he nonetheless manages to refer to it in total in 10 different ways, including the Receptacle.19 As Miller suggests, while these

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19 Collecting together titles and figures of speech, we find at least ten distinct expressions for this enigmatic principle, as per Mitchell Miller. The largest subgroup includes images of containment, specifically those of Imprint-bearer (50C2), Container (50D3; see also 53A3; 57C3), Winnowing Basket (52E6), Receptacle (49A6; 51A5), and Universal Recipient (51A7). Another subgroup contains metaphors of nurture, those of Nurse (49A6; 52D5; 88D6), Foster Mother (88D6), and Mother itself (50D3; see also 51A5). Filling out the list are two titles importing location, Space (52A8; see also 52D3; 53A6) and Place (52B1). (In Reydams-Schils 2003: 63)
might not be anything more than the figures of speech, “we have no other access to the Receptacle’s nature than by tracing out their various ramifications” (In Reydams-Schils 2003: 63).

In the second tale, we are told that χώρα, which can be roughly translated as *space, place, site, espace, Raum*, is the single name by which ‘the wet-nurse and the receptacle of all becoming’ (51B) can be properly called. Plato tells us that this is indestructible recipient that, as he describes, is like a mother of all things generated and perishable (50D). It existed beside the realms of being and becoming before the starry heaven came to be (52D). The third kind of thing is structurally similar to an everlasting place that cannot be destroyed and that at once provides room for all generated and perishable things. It is invisible and can neither be clearly perceived nor be thought of. It is apprehensible only by ‘a kind of bastard reasoning’ (by the aid of non-sensation, and is hardly an object of belief [52A–52B]). Plato says that our experience of χώρα most of all resembles the state of dreaming. When we dream we confuse the images we see with real things and, moreover, think that what we see is the only thing that is real. Plato argues that thinkers who say that everything that exists must exist in space, or else it does not count as existing at all, are like people who dream and discourse about the images that come by. χώρα, then, is “difference at the origin” of all existing (El-Bizri 2004: 26). It designates an imaginary line in space beneath which the only kind of the paradigm that exists is a sensible generated copy and an imitation thereof. In this capacity, χώρα provides “the substrate upon and the space in which the eternal realm of Being makes its mark and instantiates itself on the way to the creation of the sensible world” (Bianchi 2006: 124). So, Sallis: “χώρα enables and limits sensible images of the intelligible” (Sallis 1990: 145)
The function of the so-called Receptacle (*hypodoche*) is at all times to receive all things in itself. It never in any way whatsoever takes on any character that is like any of the things that enter it (50B). It is molded and remolded into various shapes. It is a kind of “matrix” (moulding-stuff) that, although it is changed and greatly diversified by the things that enter it, and on their account, appears to have different qualities at different times, nonetheless, stays always the same (50C, 51A). The suggestion here is that what receives in itself all sorts of things must itself remain amorphous and free from all characters. Accordingly, many authors (Lee 1966) have thought of the Receptacle as a reflecting surface, or a mirror, which is a neutral medium or a field that is independent from the images of things that withdraws before, or gives place to, what it in this way “receives” and so “holds” in itself.\(^\text{20}\) It does not become “re-placed” by these images, because it neither changes when different things come to be in it nor destroyed when they disappear from it. Miller claims that for that reason the expression that came to be “used most consistently for the third Kind is “that in which” (τὸ ἐν ὧ), as in “that in which <the second Kind> comes to be” (τὸ ἐν ὧ γίγνεται [50D1]). Just as the word “container” both refers to and distinguishes itself from what is “contained,” so the expression for the third Kind both refers to and distinguishes itself from the second Kind, that which comes to be “in” it” (D. Miller 2003: 53)

§8. *Four Kinds of Elements.*

The receptacle appears to have the dual role of serving both as material

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\(^{20}\) Cf. Cornford, 1997, 177: “We now learn that the copy is not self-subsistent; it needs the support of a medium, just as a reflection requires a mirror to hold it.”
substratum, and as spatial field. The account of the receptacle is elusive and presents a number of considerable difficulties for the interpreter, some of which will be discussed by me in the course of this thesis. In the “pre-cosmic” state (the state “prior to” the intervention of the Craftsman, that upon closer inspection proves to be a problematic, if not to say misleading, notion) the Receptacle is subject to erratic and disorderly motions. In the pre-cosmos, its contents are mere “traces” (ichnê, 53B2) of the soon-to-be-distinguished four “kinds” of the elements (stoichea): fire, water, air, and earth. The Craftsman begins by constructing four of the regular solids as the primary bodies of each of these four kinds. Four of five Platonic solids, as they came to be called, represent infinitesimally small divisible three-dimensional corporeal bodies of different sizes with distinct geometrical shapes. They have faces that are made up of two sorts of right-angled triangles — the half-equilateral and the isosceles. It is these

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21 At least, this is the treatment that the third kind of thing received from Aristotle: He did not make any use of it once he said that there is a kind of underlying thing (hypokeimenon ti) for the so-called elements just as is <a kind of underlying thing> for works made of gold” (Phys. 329A15-17). Aristotle conceived of “the underlying thing” as “that out of which,” e.g., “for there always is that which underlies, out of which that which comes to be (to gignomenon) <comes to be>” (Phys. 190B3-4). Aristotle thought Plato's view of matter was the same as his own. He speaks of “the Nurse (i.e., the primary matter),” (De Gen. et Corr. 329A23) and states twice that matter is mentioned in the Timaeus (Phys. 210A1-2, 209BII-2). But Aristotle's term for matter (hyle) is not used even once by Plato in that sense. For that reason, it is aptly to refer to the Timeaen cosmology as cosmology without matter.

22 Euclid completely mathematically described the Platonic solids in the Elements, the last book (Book XIII) of which is devoted to their properties. Propositions 13–17 in Book XIII describe the construction of the tetrahedron, octahedron, cube, icosahedron, and dodecahedron in that order. For each solid Euclid finds the ratio of the diameter of the circumscribed sphere to the edge length. In Proposition 18 he argues that there are no further convex regular polyhedra. Andreas Speiser has advocated the view that the construction of the 5 regular solids is the chief goal of the deductive system canonized in the Elements (Weyl 1952: 74). Much of the information in Book XIII is probably derived from the work of Theaetetus. Of the fifth Platonic solid, the dodecahedron, Plato obscurely remarks, “...the god used [it] for arranging the constellations on the whole heaven.” Aristotle added a fifth element, aithêr (aether in Latin, “ether” in English) and postulated that the heavens were made of this element, but he had no interest in matching it with Plato's fifth solid.
triangles that are counted as the fundamental “simples” of the physics of the
dialogue. Because their triangles are similar (half-equilateral), only particles of
fire, air and water may be transformed into one another, whereas the ‘form’ of
earth prevents its basic constituents from being used in other elements.

As is evident, all the properties that each of four elements has in nature are a
product the geometrical shapes of their bodies, and these properties in turn
determine how the particles act upon and react to one another. In Timaeus’s
account, earth was associated with the cube, air with the octahedron, water with
the icosahedron, and fire with the tetrahedron. There was intuitive justification for
these associations: the heat of fire feels sharp and stabbing (like little tetrahedra);
air is made of the octahedron; its minuscule components are so smooth that one
can barely feel it and so forth. (It is here that Necessity plays its important role in
Timaeus’s account.) All these actions and reactions are ongoing and perpetually
sustain the cosmos in a state of non-uniformity which itself is a necessary
condition for motion, i.e., the continuation of the interactions. Although each of
the four elements has a tendency to move toward its proper region of space, the
inevitable transformations that occur when elemental bodies as well as compounds
formed out of them cut or crush one another assure that these migrations are never
completed. I will problematize this notion and develop further in Chapter IV.23
Chapter II. Cosmogony and Cosmology

Divinity and nature – Nature of the world and heavens – Method of science – Astronomy in the Academy – Limitations of natural science.

§9. Divinity and nature.

Plato’s philosophy, or at least parts of it that Plato thoroughly documented for us in the dialogues, is as distant as it gets from an image of philosophy that can only be done by sages. It is a product of Plato’s admiration for his teacher Socrates, who famously proclaimed “I know that I know nothing.” Socrates was the spokesperson for an epistemological turn at the end of fifth century BC in ancient Greek philosophy, advocating for an examination of fundamental presuppositions lying at heart of the possibility of knowledge of the external world. A way of interrogating an interlocutor to draw out ideas and underlying presumptions to help further, or better, our understanding of some matter came to be known as Socratic method. It figures prominently in Plato’s work, especially in early and middle dialogues, where through his mouthpiece Socrates Plato explores nature of things such as law (Crito), piety (Eutypbro), and even life and death (Phaedo). The dialogues of that period are universally characterized by Plato’s sustained effort to bring philosophy “down from the skies” and establish the foundation on which all future knowledge can firmly rest. For that reason, scholars have long been struggling to understand how anything like Timaeus

having in itself dreadful and compelling passions pleasure first, the greatest incitement to evil, then pains that frighten away good, and besides these confidence and fear, witless counsellors both, and wrath hard to appease, and alluring hope. Having mingled these with irrational sensation and with love that stops at nothing, they composed as they could the mortal soul of man.” [“The remainder of the dialogue deals in more detail with the creation of the mortal elements of the soul and with the fashioning of the body. It contains also a discussion of health and disease, and a brief consideration of the rules for an harmonious development of this union of soul and body which conditions our present life.” (The Religion of Plato. More, Elmer Paul. { Princeton: Princeton University Press, 1921} pp. 196-197)]
could ever be born, because Plato’s thought evolved in the field of ideas and values that were foreign to speculation on the physical nature of things. In that sense, a move to cosmology seems to be a rather unlikely, if not to say unexpected, development of Plato’s philosophy. In this chapter, I will argue that the *Timaeus* is called to demonstrate that upon closer inspection Plato’s hypothetical survey of phenomena as part of his larger project does not have a rival in the face of physics that was growing into a separate science in the Academy.

The *Timaeus* is considered to be Plato’s most unintelligible dialogue of all because of how many subjects it tackles at once. It throws the reader in the hands of an erudite Timaeus who is honored by Socrates in the text with a right to address the audience with a long speech about nature, cosmos, and God. A naturalist and scientist, Timaeus offers us what he counts as a rational explanation of the structure of the universe with the Demiurge and lesser gods on top and humans and animals below. He takes us on journey from the beginning of Demiurge’s work on the creation of the physical realm, to which Plato refers to as “this All” (*Tim*. 28C4; 29D7; 41A5), to the generation of fire, water, earth, and air. As a whole, Plato’s *Timaeus* is emblematic of the Hellenic world-view, in which the divine could exist side by side with the natural. Accordingly, the first substance theorists (Thales, Anaximander, Anaximenes, Heraclitus) did not have the slightest difficulty in viewing “the primary element or ‘nature of things’ as living” (Cornford 1997:168). They supposed there was immortal and divine substance that could move itself because it was alive. It was not until after this substance was reduced to the level of the bodily that it was discovered that substance of the world that moved and gave birth to individual things needs some
external force to move it about. Plato was not the first to make natural phenomena are caused by the divine. Various non-natural powers (e.g., the Mind of Anaxagoras, the Love and Strife of Empedocles) that shaped the world as we know it today made prominent appearances in the cosmogonical counterparts of Timaeus’s story that came before it.

However, one should be cautious of conflating the respective provinces of cosmology and cosmogony. We cannot say that just because Plato’s *Timaeus* fails to part completely with antedated views of nature it does not go beyond Hesiod’s *Theogony*, for instance, in how accurately it explains the universe. Even though Plato assumes that there is a divine counterpart to the natural world, the place reserved for it in the cosmogonical records of antiquity is not the same as the role that the Timeaen cosmology makes it play in the creation of the *kosmos*. For the concepts of nature and divinity which they apply are radically different. As I will show, in spite of the seemingly confusing terminology with which it operates, Plato’s natural philosophy is not at all alien to the scientific spirit.

§10. Nature of the world and heavens.

In the pagan religion which came to the Peloponnese, the only part of the world that was thought to be worthy of being venerated as divine in its own right was the heavens. The world under the sun did not enjoy the same privilege. It was hardly celebrated on behalf of the unity of its parts, order, guiding principle, or anything else of that sort that could confer upon it as noble a status as that to which heavens were entitled. To the contrary, following Hesiod, Greeks thought that the father of all things was Chaos (*Theogony*) and that, consequently, everything is stamped by the mark of the primordial state of Chaos from which it derived. They did not distinguish between truth and fiction and just as they believed that the cause of the
movement of heavens was divine so in their myths they projected on the world how in their experience nature of the human beings compared to gods. In the ancient Greece, life in the polis, muddled by famine, wars, and death, was far from being perfect, which its inhabitants memorably perceived.

It led Hesiod to characterize the contemporary age (Works and Days, 109-126) in a celebrated account of the successive ages of humanity as significantly worse than what life used to be the past. In the Golden Age, so the story goes, the Earth provided food in abundance and humans led a peaceful way of life, with the spirits of dead ancestors acting as their “guardians” (Cratylus. 397E), but once we had lost the access to the source of consolation no one knew how to regain the state of bliss again. Life turned into misery because from then on humans had to perform arduous toil to force a living from the land or else fall victim to the bareness of soil which no longer tended to human needs so heartily. That is, Earth became one with non-human powers over which humans had no control at all. And unlike good spirits of the human guardians, they did not care for the good of humans at all.

As Thucydides reports, life in this state was increasingly viewed as divided between the field of ordinary human foresight (γνώμη), on the one hand, and Fortune, on the other. There are, as it were, human wishes, fears, dreams, and hopes with understandable and intelligible purposes in this life and everything else which lies beyond it, the unknown field of inscrutable non-human powers. Cornford showed that Greeks did not conceive of nature as the domain of causal laws, but rather, like Thucydides, believed that, besides the causes, or better to say, motives of human action (Cornford 1997:171) there was something like Fortune. It designates ‘a non-natural agency that can break in from outside and
divert the current of events, without itself being a part of the series or an effect
determined by an antecedent member of it’ (Ibid). Thus, there are absolutely
unforeseeable and extraordinary irruptions of the Other, whether we call these
gods, spirits, or Fortune, that defeat the purposes of human ἀντίκεισθαι. Together,
Fortune and ἀντίκεισθαι are “the sole determinant factors in a series of human events”
(Ibid)

It is primarily against this view that Plato claims in the *Timaeus* that the
cause of the regular motion of the heavenly bodies will never aim to produce
random effects. Plato scrutinizes cosmogonical models of Pre-Socratics because
they do not explain at what stage of the genesis of cosmos human faculty of
reason comes to be and what role reason has to play in the movements of brute
matter, and *vice versa*. The writers of the mythic cosmogonies did not grasp hat
the physical world as a whole would be horribly incomplete (not that this would
ever have been possible on Timeaen assumption, as Broadie suggests) if there
were no human beings who are able to think comprehensively about the physical
realm and “the fact that it includes them thinking comprehensively about it and
themselves together” (Broadie 2012: 4). He uncovers that there is a fundamental
contradiction in holding that there is some divine principle inherent in the
movements of matter all around us and to say at the same time that what we feel
and think is just a copy of the world without any internal meaning or purpose
which serves merely as the playground of witty and cruel gods.

His objection to the overwhelming number of people who attributed to the
heaven and Earth a common nature was that they were wrong in supposing that
the divine wouldn't make any special arrangements for the whole world and
heavens to come out the best way possible. For Plato was convinced that wrong
stories people tell about gods (Rep. 362B-367E) reinforce morally corrupting materialist belief that “Nature gives birth to things as a result of some spontaneous cause that generates without intelligence” (Sophist. 265C). In Phelibus (28D), Plato warns us that we should not agree with clever persons who confront us with a view that this “whole,” rather than being “guided by some admirable reason or intelligence,” came about by chance and that it is at the disposal of forces working purely at random and without any plan. This is an obvious reference to Empedocles’s theory which says that that the cause of phenomena is that Nature randomly generates things which grow and continue living and others still such as “man-faced ox-progeny” which grew in a different way and perished because they were wiped out by the organic structures that were better organized. Aristotle’s summary of Empedocles’s philosophy reads: “Why then should it not be the same with the parts in nature … since they did not arise for this end, but it was merely a coincident result; and so with all other parts in which we suppose that there is purpose?”

So it is the case with the earliest cosmogonies that they were predominantly of the evolutionary type, of which he draws a generalized picture in the Laws (888E-890B):

Some, says the Athenian, assert that all things come into being partly by nature, partly by chance, and partly by design. Fire and water, earth and air, they say, all exist by nature and chance, not by design; and these inanimate things then bring into existence the Sun and Moon, the Stars, and the Earth. They all move by the chance of their several powers, and according as they clash and fit together with some sort of affinity — hot with cold, dry with moist, soft with hard, and in other mixtures that result, by chance, of necessity from the combination of opposites — in that way they have generated the whole Heaven, animals and plants, and the seasons, not owing to intelligence or design or some divinity, but by nature and chance. Art, is a later product, mortal and of mortal origin. There are the fine and useful arts, and the art of statesmanship. All law is artificial, not

natural; so religion and morality are matters of convention, which vary from place to place and can be altered at human pleasure. This leads to the belief that might is right, to impiety and faction (Cornford 1997: 167).

The earliest cosmogonies attributed spontaneous power of generation to a vaguely personified Nature with a capital N (Cornford 1997:167). Plato thought that all of them miss the target because they profess false beliefs about the nature of gods. One could even say that they confuse truth with opinion and posit as the first principles (arche) things which are not even remotely suited for this role. Then, of course, there is a discussion of the Mind of Anaxagoras in *Phaedo* (97B5-99D3), in which Socrates discloses how surprised he was when he found out that even after Anaxagoras listed the Mind as that which keeps everything moving, he nonetheless continued to stipulate as the causes of phenomena “air and aether and water and many other strange things.”

Socrates complaints that after Anaxagoras introduces the Mind he immediately associates things generated by it with bodies. Plato says it is the same as saying the Socrates does everything because of reason and then calling the cause Socrates’s sitting in prison the latter’s stretching and bending his bones, sinews, flesh, and so forth. As Johansen explains, in the *Phaedo*, Plato wants to suggest that it Anaxogras is not consistent in the use he makes of Mind because the reason why Socrates is actually in the prison is “his belief that it is better to submit to the judgement of the Athenians than to run away” (Johansen 2004: 103). Rather than being a real cause, the muscle tone represents merely a ‘necessary condition’ of action because, as Socrates himself tells us, his bones and sinews would have been on their way to Megara if he “believed that to be the best course of actions” (Ibid).
Thus, Plato was reluctant to accept his predecessors’ theories primarily because he thought that the cause of the movement of heavens cannot be the same as any of the things which can be acted upon from the outside and which fulfil the requirement of necessary condition. Rather, there must be a reason why exactly this movement follows upon the cause, and not any other. A common father of heavens and earth is therefore to be sought in divine cause of regular and orderly patterns of motion observed in the sky. For that reason, Plato replaces Chaos and the inanimate material substances as the candidates for the first principles of everything with a separately standing Intelligent Craftsman. Plato mercilessly criticizes the view that there is such a thing as Fortune or that it ever gains a significant traction in human life. He comes with a completely different perspective on the meaning of being alive and the place that reason occupies in human life, which allows him to affirmatively ascertain right at the beginning of the discourse proper of the *Timaeus* that without saying something that is deeply blasphemous (*ou themis*) one cannot deny that ‘of all the things that have come to be, our world is the most beautiful’ (29A7).

§11. Method of science.

Undoubtedly, there is more than programmatic statements on aesthetics which distinguishes the *Timaeus* as a work of merit. It is the only dialogue where the main speaker in the text invokes gods to let the *logos* he is about to produce to take place, signalling the speaker’s waving the right to establish the truth of his words with certainty which exceeds the standards to which he himself shows readiness to subscribe the ensuing discourse. It is in other words a dialogue whose contents are admittedly suspended somewhere between being not less truthful than similar accounts of things (in fact, ‘not less likely than others’) and not more
truthful than the accounts which hold good of things that are completely so intelligible (i.e., the Forms) (cf. Rep. 475A-480C). As I will show, for this reason, Timaeus’s discourse receives from Plato the name of a “likely story” (εἰκός μύθος) at 29D2 in the dialogue. Likewise, to my knowledge, it is the single place where Plato openly expresses his views on empirical science as an activity in its own right and not just as a kind of a rational pastime. He issues a fair warning against divorcing the progress in natural sciences from the effects of the existence of Forms by presenting an original cosmology. With the *Timaeus*, Plato poses to the newly emerging disciplines the question that is central for the whole of his philosophical project, namely, what kind of knowledge it is that can allow us to live most happily?

The treatment this question receives in Plato’s hands always reflects that there is no general recipe for the right answer. Rather, the truth is thought to be already known by the soul but forgotten and thus in need of recollection through a disciplined exercise of reason, namely, dialectics. At the same time, Plato seems to be comfortable with the idea that we will not always be able to make any progress in this beyond identifying and refuting false beliefs and helping others towards the better understanding. Nevertheless, after this questioning goes through numerous rounds, as in Plato’s dialogues, then the general line of interpretation and its ramifications start to take shape. It is in my opinion Plato’s firm belief that philosophy can change what other people think and feel and consequently make them better in a way that is perhaps one of the most burning issues at stake in the defense of his method of inquiry about the truth. Plato imbibes the Ideas with existence that is ontologically independent from the world of change (our world).
It is the Forms, or the Ideas, that are the real objects of cognition, which make things to appear; not the phenomena, about which practically nothing can be known other than that they come to be through some sort of participation (methexis) (see *Phaedo*. 100D). It is only natural, then, that Plato believes that it is in the power of philosophy to influence what kind of society it is that we live in and what people value as the cardinal virtues, which he famously pictures in the *Republic* as an escape from the cave with shadows on the wall to the bright light of the day outside. In other words, it is the existence of Forms that is at heart of Plato’s continuous engagement with the question concerning the ways in which knowledge can improve our life. For that reason, Plato’s *Timaeus* can best be characterized as a project to isolate and contain the growing rift between the methods of philosophy and a field or a discipline “which lies somewhere between medicine and mathematics,” as Jowett puts it (Jowett 1892: 470). He says Plato “would have felt that there was as great an impiety in ranking theories of physics first in the order of knowledge, as in placing the body before the soul” (Ibid).


Plato was committed to a view that people, especially young scientists, have to be instructed on the nature of Forms. Otherwise, they would not be able to produce any thoughtful work and would make ‘the soul look very much downwards’ (*Rep*. 529A5-6), instead of helping themselves and others to raise above the world of change to contemplate the eternal and unchanging Forms. There is, so to speak, a distinction between the visible and the intelligible in Plato, to which I will return later, with knowledge being restricted to the intelligible. Because visible things enter our soul through the body, Plato claims that no
knowledge can be had of them on the assumption that sense-perception stands to reason like opinion to truth.

However, not everyone was convinced by Plato’s arguments in favour of this view even in the Academy where he taught. In the fourth century BC, the range of the disciplines pursued in the Academy starts to go beyond the problematics limited to ethics and politics and investigation of the natural world under the influence becomes an integral part of the research programme in the Academy under the influence advancements in the field of astronomy. It is associated primarily with figures of Heraclides Ponticus (390–310 BC), Philip of Opus, and Eudoxus (390–337 BC) who recently joined the Academy and graduates Xenocrates (396–314 BC) and Aristotle (384–339 BC) who start making their first steps as independent thinkers. Using the Academy as a platform, they teach classes, write books in different genres, work out their own theories, and critically evaluate Plato’s own teaching.

Through the work of Xenocrates and Philip, natural philosophy gathers a momentum and the problematics of physis becomes widely discussed. Eudoxus develops mathematical geocentric model of cosmos. He also systematically performs the observation of heavens in the observatory and uses the data in making astronomical compendiums “Phenomena” and “Mirror” and provides an account of the eclipse of the Sun. Similarly, Philip performs observations and composes a lunisolar calendar, “a parapegma,” required for an accurate calculation of the time of rising and setting of stars and weather forecast. Likewise, he writes a number of books: “On the distance from the Sun to the Moon;” “On the sizes of the Sun, Moon, and Earth;” “On the eclipse of the

Even Plato’s nephew Speucippus (410/408–339 BC) — who only had remote knowledge of astronomy — starts learning how to do a research and compiles and completes a classification of over 55 species of plants and animals in the process of “botanical investigation through empirical observation” (Guthrie 1978: 464). Likewise, Aristotle contra Plato defends the unity of theoretical and empirical parts of physical investigations. He asserts that that calculations cannot land the astronomers in the right explanation of phenomena separately from keeping a careful record of observations (Anal. Pr. 46A17-21). Thus, knowledge based on sense-perception receives from Aristotle a scientific status, which, in turn, allows him to attribute to physics the status of a theoretical science and view it in the ranks of fundamental theoretical disciplines on a par with mathematics and theology (Met. 1026A6-19; Met. 1064B1-3; Phys. 193B2-36). With a probable exception of Speucippus, all of the named thinkers show a keen interest in astronomy and confront the old ways of studying heavenly bodies with new methods. Philip asserts that the astronomy is the principal wisdom and calls “the true astronomer… the wisest person” (Epin. 990A5).

§13. Limitations of natural science.

Plato always was very appreciative of the didactic value of knowledge of “the embroidery in the sky.” However, he would not have applauded Philip’s conclusion because, according to Plato, “we should use the embroidery in the sky as a model in the study of these other things” (Rep. 527A-530D). In the Republic, Plato emphasizes that, in the last analysis, heavenly bodies are not free from imperfection. They resemble the Forms that the Demiurge made them imitate on
their orbits only remotely. He continues by saying that “Since there’s no knowledge of such things” and suggests that if we don’t want the natural vocation of reason to be lost in gazing idly at the skies, we must study the astronomy by “means of problems, as we do geometry, and leave the things in the sky alone.” Because heaven is the most beautiful of all visible things in the world, there is, so to speak, an inherent risk of imparting to shapes of the observed motions depicted in “the decorations in the sky” the status of the true ones,\(^25\) when growing too enthusiastic about the astronomy. For that reason, Plato claims that the real astronomers need a philosopher-director, without whom they wouldn't be able to achieve any progress in their work.

Plato was right when he predicted that exercises in astronomy can possibly make ‘the soul look downwards’ because once a disciplined observation of heavenly bodies and speculation on the emergence and structure of cosmos is in place then it is only a matter of time before a whole new school of natural philosophy allied with a study of the physical realm within the framework of applied sciences becomes launched into the orbit of methods of inquiry about truth. This, in turn, implies a recognition of a high ontological status of sense-objects, an assertion of independency of their existence from everything else, and, by the same token, establishment of the mechanism of their generation from the

\(^{25}\) In the *Timaeus*, “Plato also speaks as if some things big enough to be perceived may be perfectly such and such. That is, the fixed stars will at least sometimes be borne about in perfect circles (34b). Nehamas and Patterson have called attention to the fact that the famous passage on equals at *Phaedo* 74-75 says nothing to indicate that perceptible equals are always only approximately equal. The ancients do not in general distinguish perceptibles from Forms or mathematical objects on the grounds that there are no perfectly circular or equal perceptibles but emphasize the spatial extention and divisibility of perceptibles. This seems more in keeping with the *Timaeus*. Nevertheless, it must be admitted that Plato thinks in many cases perceptibles are not perfectly circular or equal, and he sometimes sounds contemptuous of those who focus on them” (Anton & Preus 1992: 322).
first principles, i.e., four elements. The concept of nature in physics, therefore, in spite of all its merits, is not completely free from the influence of ancient cosmogonies. For it likewise assumes that heavens and Earth are the products of Nature and that things like soul, mind, and intelligence were generated later than the elements. Plato says that “modern pundits” (Laws. 886D) were greatly mistaken in seeing “fire and water, earth and air as being the first of all substances (Leg. 891c).” He was worried about the moral implications of circulation of such a teaching because he thought that it led to what Plato regarded as the atheistic materialism that corrupts morality.

As the analysis of the Timaeus shows, Plato kept track of the most recent achievements of contemporary astronomers. However, he did not accept the methodology of natural science, whose claims to know the truth he, at any rate, always viewed skeptically (Lloyd, 1968: 78-92). A view of Nature espoused by his students was incompatible with Plato’s own teaching about Forms, on the basis of which he interpreted everything in terms of the schema “model (Idea, or Form) — copy (a sensible particular).” It says that sense-perception deals with imperfect imitations of Ideas coming to be and passing away all at once before our eyes in the world of change and that we can only reach the truth by turning to the real models that we can contemplate with our mind’s eye alone.

The only way to defend the Theory of Forms in that case was to assimilate it to an original cosmology. Its purpose would be to challenge various cosmological models that were discussed in the Academy at that time (that of Eudoxus, Philip, Xenocrates, Aristotle, and Heraclides) and to demonstrate the explanatory power of the teaching about Forms that was suspended by his students. In particular, it would have to explain “what on earth the Forms
contribute to sensible things, whether eternal or subject to generation and decay” (Aristotle, *Met.* 991A9-11) and to show what is wrong with the teaching that treats fire, water, air, and earth as the absolutely first principles (*αρχι*) of everything, from which cosmos in the form it has today evolved.

The defense of the Theory of Forms determined not only the purpose of the *Timaeus*, but also the way in which it was accomplished. On this occasion, Plato abandons a well-known form of the maieutic dialogue and offers us a monologue.26 Most of the Timaeus resembles a programmatic lecture whose goal is to induce in the audience a clear understanding of the subject.27 Obviously, the character of Socrates who never stops reminding us that his knowledge of everything was limited was far from being the best candidate to perform this task. Instead, Plato chooses as his mouthpiece Timaeus of Locri,28 an erudite astronomer who made his main occupation learning nature of all things (27A2-3) and who reached incredible heights in philosophizing (20A5). It is as though from the top Timaeus could observe what really is (το ὁδότι), “the rim of heaven,”29 and, therefore, had all the reasons to present a credible model of the genesis of cosmos.

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26 On the relationship between the content and form in Plato’s dialogues, see *Laws*. 892D-893A.
27 When he begins his lecture, Timaeus implores us to appeal to ourselves “to make sure that you learn as easily as possible, and that I instruct you in the subject matter before us in the way that best conveys my intent” (27D).
28 Here, it doesn't matter whether Timaeus of Locri was a historical figure or Plato’s invention. In any case, it is evident that Plato’s choice is not arbitrary. This name indicates Timaeus’s fame. Furthermore, his home city, Locri, was famous for its law (*Laws*. 638B) that was established by Zaleukos, a student of Pythagoras. It was supposed to highlight, on the one hand, that Timaeus successful political career and, on the other, to hint at his relation Pythagoreanism.
29 Cf.: in the myth of Phaedrus souls that ascend to the top are called immortal. When they reach it, they “move outward and take their stand on the high ridge of heaven, where its circular motion carries them around as they stand while they gaze upon what is outside heaven” (*Phaedr.* 247B-C).
The opening of the dialogue strongly suggests that the dramatic date is the day following the conversation conveyed in the *Republic*, and this in turn suggests that, even if the date of composition was much later, Plato intends the reader to see the two dialogues as intimately related. One of the most important themes of the *Republic* — the distinction between the world of Forms and that of images or appearance — also figures prominently in the *Timaeus*. But Timaeus also introduces themes absent from other dialogues: the development of an elaborate cosmology in the form of the “likely story,” the introduction in this story of a being called the Demiurge (δημιουργός) who is responsible for forming the world of appearances into a cosmos (κόσμος) by ordering it as far as possible on the model of the intelligible Forms, and the third kind of thing the function of which is to receive and to provide support for the images so created. The Timaeus is, at very least, posing questions and offering a story that goes beyond what is found in earlier dialogues such as *Republic*, *Meno*, and *Phaedo*. (For example, “Why is there a world of appearances at all?” and “How did it come into being?”) But the introduction of the Demiurge and the Third kind — the Receptacle — also seems to require us to rethink the “two worlds” model familiar to us from the middle dialogues. Some commentators (Broadie 2012, D. Miller 2003, Carone 2005, Robinson 2004, Gadamer 1980, Shorey 1903) have suggested that the Timeaen cosmology keeps perfectly in line with the ontology espoused in the earlier dialogues. Others (Sayre 1983, 2003, Kahn 2007, Silverman 2002, Fronterotta 2001) have suggested that the *Timaeus* signals a reform of Plato’s thought on Forms with intent to rescue his metaphysics from the regress arguments of the *Parmenides*. They regarded the dialog as providing a new ontology differing from how Plato addressed in the past the question of the participation, or *methexis*.
(μέθοδος) as part of the two-worlds model. For example, Mohr 2005, 87 (cf. xxiv and 255) suggests that the Timaeus is an experimental solution of “the problem, left over from the Republic, of how becoming holds a middle ground between being and non-being.” Still others have approached the dialogue in more critical terms, seeing it as deeply confused (Aristotle) or faulting it for not developing its key concepts in the proper way (Proclus).

I will develop my own views on these topics in the course of this thesis. But it is useful to begin with a critical review of how the two worlds model is developed in earlier dialogues. Through this process we will both see some of the difficulties in interpreting the various things, and also see several ways in which some of the developments in the Timaeus may be foreshadowed, particularly in the Republic. I shall begin this with a discussion of the various terms Plato uses to refer to the Forms, and the turn to two ways he discusses them: metaphysically and as objects of knowledge.
Chapter III. Assimilation of the Theory of Forms to Cosmology

Forms and Kinds – Knowledge as recollection – The two worlds – Ramifications for cosmology – Ascent to truth – Metaphysician’s Receptacle

§14. Forms and Kinds.

In the *Timaeus*, Plato conceptually distinguishes “the third kind” (τρίτογ γένος) from the other two kinds of things (είδη), namely, the images and the paradigms after which they are modelled. Many commentators of the *Timaeus* see Plato’s move in the cosmology as conflicting with the two worlds theory espoused by him on previous occasions, most notably in the arguments in favour of the Theory of Forms developed in the *Meno, Gorgias, Phaedo*, and the *Republic*. The conflict with the Theory of Forms that Plato’s introduction of the Third kind is said to generate is localized in the province of metaphysics. In the *Republic*, Plato coins for the Theory of Forms a purely metaphysical articulation in terms of the two-worlds model, which I propose to discuss very briefly to refresh in our memory what the Theory of Forms says and find out whether Plato’s introduction of the Third kind in the *Timaeus* actually conflicts with it or not. But before we do this, it pays well to unearth the foundation of the distinction between being and coming-to-be that the characters in Plato’s dialogues are always at great pains not to collapse. I will argue that there are parts of Plato’s philosophy in the earlier dialogues which in a way anticipate and even presage the developments of the *Timaeus*.

First of all, there are difficulties raised by the terminology Plato uses to set up as distinct three kinds in the *Timaeus*. He begins the discussion of the Receptacle thus: “Earlier we distinguished between two είδη, but now a different
third \( \gamma\varepsilon\nu\varsigma \) must be explained” (48E). The questions that we should ask ourselves are: what is \( \gamma\varepsilon\nu\varsigma \) and whether it is different from \( \epsilon\imath\delta\omicron\varsigma \) and, if so, then how?

Plato’s commentators often take \( \epsilon\imath\delta\omicron\varsigma \) and \( \gamma\varepsilon\nu\varsigma \) to be generic names of essentially one and the same thing, namely, the Forms, which are also called by Plato \( \iota\delta\epsilon\alpha\varsigma \) (in the plural). But this is evidently a misguided notion, as there abound in Plato instances in which the words \( \epsilon\imath\delta\omicron\varsigma \) and \( \gamma\varepsilon\nu\varsigma \) cannot be adequately translated by the more technical term Forms, and rather denote a more or less determinate group of things. For example, at 79A6-7 in Phaedo Plato says: “Do you wish that we posit two \( \epsilon\imath\delta\omicron\eta \) of things which are, the one visible, the other invisible?” It is not difficult to see that such things as a tree, a chair, or a sword, which fall into the former kind do not share any evident properties in common beyond their visibility. Moreover, visibility can be said of these things only relative to seers, “which is to say that visibility is not an attribute that can define these things (that is, a differentia)” (D. Miller 2003: 38). It is apparent that the sense in which Plato uses \( \epsilon\imath\delta\omicron\varsigma \), like \( \gamma\varepsilon\nu\varsigma \), in most cases depends on the context.

“This, along with Plato’s annoying tendency to use different words for the same concept,” which I have just pointed out, “was noticed long ago” (Ibid.). As Diogenes Laertius remarks, “Often [Plato] uses different words to indicate the same things: he calls \( \iota\delta\epsilon\alpha \) and \( \gamma\varepsilon\nu\varsigma \) ‘genos’ and ‘paradigm’ and ‘principle’ and ‘cause’” (3.64). For continuing to use the words \( \epsilon\imath\delta\omicron\varsigma \) and \( \gamma\varepsilon\nu\varsigma \) interchangeably to refer to one and the same thing in different contexts, namely, ‘a kind,’ or a

\[ ^{30} \text{For Plato’s use of } \gamma\varepsilon\nu\varsigma \text{, see: 1) Republic, 477C1: “We shall say that powers are a } \gamma\varepsilon\nu\varsigma \text{ of the things that are;” 2) Sophist, 260A5: “In connection with statement (} \lambda\omicron\gamma\omicron\sigma\omicron\varsigma \text{) being one } \gamma\varepsilon\nu\varsigma \text{ of the things that are;” 3) Theaetetus, 206B7-8: “We shall say that knowledge of the } \gamma\varepsilon\nu\varsigma \text{ of the elements [or, letters] is much clearer;” 4) Politicus, 260C7-D1: “In the way that heart of the retailer is distinguished from the art of those who sell their own wares, so the } \gamma\varepsilon\nu\varsigma \text{ of kings appears to be set apart from the } \gamma\varepsilon\nu\varsigma \text{ of heralds;” 5) Timaeus, 46E3 “Both of the } \gamma\varepsilon\nu\eta \text{ of causes should be stated.” For } \epsilon\imath\delta\omicron\varsigma \text{, see: 1) Cratylus,} \]
loosely defined class, Plato even incurred upon himself Aristotle's censure for misusing the term γένος, because “to define a genus one must state the properties that the genus has of itself (its “differentiae”), not in relation to other things (“accidents”)… Plato does not do this, but tells us about its attributes such as being knowable by us and being objects of our perception” (D. Miller 2003: 40).

So, Proclus: “Plato… did not explain what the nature is of the defining terms he uses but set out the defining terms on the basis of our knowing these kinds...” (In. Tim. 1.241.31-242.3).

Plato’s talk of kinds can sometimes be confusing because his use of the terms γένος, like είδος, implies that in each case there are some things that fall under, or belong to, these kinds; things that are their members. That being said, Plato, nonetheless, distinguished between kinds and Forms. In so far as he held that “Forms are ontologically independent of things that partake in them” (D. Miller 2003: 40), he could affirm of the former being “by itself,” whereas in his talk of the “kinds” of things he clearly suggests that they would be nothing apart from their members. In connection with this, I would like to point out that the classification of Forms is much broader than the principle or principles according to which all things are divided into two Kinds in the Timaeus entail. That is to say, the attributes of “the two kinds of things” of the Timaeus are far from being (but, I think, that they do not even pretend nor have to be) a full or exhaustive description of the characteristics possessed by things that fall under either of the two Kinds.

386E8: “Are not activities one είδος of the things that are?” 2) Philebos, 18C2-3: “… and he set apart a third είδος of letters (στοιχεια), the ones we now call mutes.” 3) Politicus, 287E8-10: “That quite diverse είδος that is produced for solid and liquid things and for things prepared with fire and for things not so prepared, <that είδος > we call by the single name ‘vessel;’” 4) Phaedo, 98A1-2 “… if he showed me these things I should be prepared never to desire <to discover> another είδος of cause.”

31 See Aristotle, Topics. Δ 1. 120B21-29.
For that reason, in the Timaeus, Plato makes a conscious effort to “set out these kinds as radically distinct and… exclusive. Although these kinds have no names, no words, commonly used to denote them, Plato seems intent to provide sufficient distinguishing… attributes of each group of things to render them determinate… as kinds” (D. Miller 2003: 42).

One more thing that I cannot skip over before I start discussing more pressing issues is that a view which attributes to Plato saying that there is a ‘kind’ of things called Forms, which Plato, nevertheless, is having difficulty in expressing because he can only conceive of a kind as being either γένος or είδος misses the point. In this line of reasoning, Plato derives the attributes of the kind “which always is <F>” by voting things of which some property F is predicable out of the office of being purely F and passing it to the Forms (the objects of knowledge) instead, for the existence of which, at least in the way Plato makes them appear, any part of his theory will invariably fail to account, at which point the distinction between the two kinds either collapses or survives merely as Plato’s fancy. In short, this interpretation intentionally shuns away from the ambiguity in Plato’s use of the term γένος, like είδος, to rescue itself from the criticism to which it is open.

I have argued that one of the reasons why Plato staves off explicitly calling one kind “Forms” is that he wants to preserve a semantical difference between classing something as Form and moving Forms into a separate kind of thing, even though in both cases the terms Plato uses for “Form” and “kind” may stand in relation to other parts of the sentence as predicates (as in beauty itself is a γένος). The latter is crucial because Form qua Form, above all else, is a way in which what it is a Form of “is” (e.g., always is, never comes to be, etc., etc.). In fact, a
kind of thing which has all these attributes does not have a name precisely because Plato the terms like γένος, είδος, and ιδέα designate its members (that is, they are overdetermined). This is a rough answer to the question of how any one Form of F-ness can be identified at all if Plato, strictly speaking, does not define his kinds. Proclus expresses it thus:

[F]or instance, when we say the beautiful itself, and the just itself, we survey beauty which is not so by the participation of the beautiful, and justice which is not so by the participation of the just; but that which is primarily beautiful, and that which is primarily just. But when we say that which is beautiful we mean that which is not mingled with deformity, nor contaminated by its contrary, such as is material beauty, which is situated in deformity, and is itself replete with its subject nature. And when we use the term ever or always we indicate beauty which is not at one time beautiful, and at another not, but which is eternally beautiful (Pr. In Tim.: 1.238)

As a result, we cannot say, “Forms are one kind of thing (meaning that their counterparts in the sensible world another)” precisely because then we leave open the possibility that there is in each case more than one eternal and unchanging Form of F-ness when we name it, which is incompatible with what being to...auto, (‘the x itself’), or kath’auto (‘in itself’), essentially implies. This expression is tolerable only if we mean by it that Forms are “pure.” That is to say, no Form admits into itself the properties other than the nature of F-ness itself because Form is, by definition the Form of F-ness. “If a Form were to cease to be F, it would simply not-be; therefore it must “always” and unchangingly be F. A Form, one might say, is really F. From this follow the first Kind’s attributes [in the Timaeus] of being always the same, of never coming to be, and of being uncaused…” (Miller 2003: 44). However, one could reasonably ask how “to be F” necessarily implies “to be apprehended by the mind to be F.” For, as Plato indicates in the Timaeus and in other places in the dialogues, Forms are the
objects of knowledge. It is this point that receives a greater thematization from 
Plato in the Book V of the Republic.

§15. Knowledge as recollection.

In the Republic, Plato defines the faculty of opining as a kind of power that 
is intermediate between knowledge and ignorance. The penultimate discussion 
comes at the end of the Book V, where Socrates opposes the lovers of sights to 
true lovers of learning. Socrates argues that the philosophers and the lovers of 
sights and sounds have nothing in common, even though both of them can be said 
“to take pleasure in learning things,” as long as they desire everything of the kind 
they love and eagerly discover new ways to enjoy it.

To put it briefly, he claims that one group attends to “what participates in 
both being and not being” and stops at forming opinion about everything, but 
lacks knowledge, whereas the other group, instead, moves beyond the faculties of 
seeing and hearing to make the object of their thought “what is” and, as a 
consequence, obtains knowledge. This is because “the conventions of the majority 
of people about beauty and the others are rolling around as intermediates” (Rep. 
ff. 479D) about which he stated earlier that “they can’t be more than what is nor 
not be than what is not, for apparently nothing is darker than what is not or clearer 
than what is.” Plato assumes it to be a basic fact about the world that change holds 
sway over all physical objects and presses them to exchange properties with one 
another. Accordingly, he argues that the lovers of sights gaze on many things, 
none of which however are only beautiful and in some respects even ugly. 
Therefore, it is impossible for them to stop in how they think about beauty at any 
one thing. And even though an opinion qua opinion may be right, as Plato 
elsewhere points out, correct answers do not necessitate the possession of
knowledge, but knowledge is indeed necessary if one wishes to repeat those correct answers. For, “the man who has knowledge will always succeed, whereas he who has true opinion will only succeed at times” (Phd. 97c).

It is philosophers who, in contrast, turn down in their love of learning “beautiful sounds, colors, shapes, and everything fashioned out of them” to see with their mind’s eye, instead, the nature of the beautiful itself. Because in the philosophers the love of learning moves them towards that which always stays the same in every respect, so the argument goes, they are not deceived by the appearances of changing beauty. They pierce the appearances to go beyond the sensible to the intelligible. On the other hand, people who embrace things over which opinion is set, indulge in excitation of their senses by the “wandering intermediate,” and reject gnósis cannot awaken to the calling of the supreme reality. They are trapped by the appearances, which hinders in them the ascension to “the vision of Truth.” In the conclusion, Socrates says that what a person who rejects the possibility of the existence of Forms essentially does is considering a likeness instead of “the thing itself that it is like” as reality (Rep. 476). Such a person is in the state of dreaming, since the sleep of reason drives him to put representation (simulacrum) ahead of what it is an image of, for, essentially, he “puts the copy in the place of the real object.”

In the argument against the lovers of sights and sounds Plato was primarily preoccupied with demonstrating that whereas ‘what is, is completely knowable…what neither is, nor is-not’ is merely opinable because opinion can only reach as far as the “wandering intermediate” goes. People are often misled into thinking they know what beauty is by making themselves replete with experience of objects of different colours and shapes. Now to deniers of Forms
Plato addresses a counter-question: if beauty is something, which of the espoused phenomena is beautiful? The objectors could possibly take refuge in claiming that all things that appear as beautiful are, more or less, so, but in different respects, to which his reply would be: is therefore knowledge of a thing that is just one $F$ impossible? He supplies an answer to this with the help of the two-worlds model. He asserts, as a part of the answer, that if knowledge (episteme) is possible, nonetheless, then it is in contrast to mere belief (doxa). It follows that in order for us to beget in our minds a clear understanding of what is true and what is right, we must abandon going exclusively with what our senses tell us and, instead, study the Ideas, or Forms.

As, Socrates explains, in order for us to grasp the truth, “we must escape from the body and observe things in themselves with the soul by itself” (Phd. 66E). This is demonstrated by an experiment Socrates conducts with a slave, who has a sudden “recollection” of the knowledge of geometry without ever having learned the subject, in the Meno. That is to say, one always already has true opinion, which once ‘stirred’ through questioning, are recollected, and ‘awakened’ into knowledge (of geometry). Plato elaborates his epistemological theory further in the Phaedo, where he makes an argument for the immortality of soul. He asserts that the soul, in between its time as a human, exists in some other place that is not the physical world. And during the time of its residence in “the buffer-zone” between human and not-human, there was not a thing that the soul, whilst being free from the contradictory testimony of the senses, did not learn.

Furthermore, if one does not ‘learn’ any new knowledge from the physical world, but only recollects knowledge that is already possessed, true knowledge must come from the time the soul spends in the that other realm. Nevertheless, the philosopher is, properly speaking, not able to know the knowledge of the other world until after his death; rather, he can only recollect aspects of it. This other realm can be none other than the soon-to-be-distinguished world of the intelligible Forms.

§16. The two worlds.

Drawing on the developmental contributions provided by the Gorgias and the Meno, the Phaedo succeeds in firmly establishing the two-worlds model. Plato defines the opposing realms as: (1) the intelligible world of invisible Forms (also called ὑπερουράνιον τόπον, “a place beyond heaven” in Phaedrus. 247D-248E), and (2) the sensible world of visible particulars. Furthermore, the two levels at which we come into contact with the separate realms as well as “organs” through which this contact is established are distinguished: (i) the intelligible world is grasped by reason alone through the soul exclusively; (ii) the sensible world is grasped by perception alone through the body and its senses exclusively. Furthermore, by applying the like-to-like principle, the Phaedo asserts that the nature of soul resembles most the divine (i.e., the Forms) — self-identical, constant, intelligible, uniform — while the nature of body the mortal (i.e., the particulars) — non-self-identical, heterogeneous, changing, sensible. All in all, the home of our bodies is the visible realm, whereas that of our souls the invisible.

The theory of knowledge as recollection, although it pre-dates the Phaedo, resurfaces in that dialogue again, but a definite development is made apparent. As Cooper explains: “There is an unmistakable reference to Meno’s theory of
theoretical knowledge (of geometry) as coming by recollection of objects known before birth. But now the claim is made that this recollection is of Forms” (Cooper 1997: 49). With it being firmly established that recollection is of Forms, the important role that Forms play in the two world theory can now be easily observed.³³ Thus, it is Forms that are things that are, as a result of which they count as the causes of everything. As Socrates coyly explains:

I no longer understand or recognize those other sophisticated causes, and 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 these confuse me — but I simply, naively, and perhaps foolishly cling 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, for I will not insist on the precise nature of the relationship, but that all beautiful things are beautiful by the Beautiful (Phd. 100D).

In the Phaedo, Plato makes a leap from assertion ‘the source of all human knowledge is the recollection of the past lives of the soul’ to that of a kind ‘things we perceive enjoy whatever reality they posses thanks to the physical likeness they share with the Forms.’ Another expression Plato frequently uses when speaking of sensibles is ‘sensibles are the imitations of Forms.’ The world that we can see with our eyes is but an image of these Forms in passing. The real world transcends our senses. Plato repeats himself in the Phaedrus when he says that the summit of the Forms is in a “place beyond heaven.” However, we are not to understand Plato literally here, for what he seems to be getting at with this analogy is that the Forms are fundamentally aspatial and atemporal. They are nowhere and outside of time because they are in no need of support as the objects

of the sensible world are. At the same time, we should beware ascribing Plato’s two-worlds model a claim that all life on earth is not real, for in that case we could just as well take on an inopportune quest of ending this life with a suicide and leaving it to other less fortunate to individuals who are ignorant about the Truth with a capital T to live in body which is a prison for the soul, which Plato himself vehemently protests on the moral grounds in the *Phaedo*.

However, the question remains just what guarantees the safety of the passage from the intelligibility of Forms in principle to de-facto existence of Forms. There is no denying that mathematics teaches us that knowledge is something which is quite distinct from true opinion and that to understand means, in the last analysis, to know something even closing our eyes on what our intuition tells us. Plato picks up on the fact that calculations, if they are diligently carried out, always yield a precise measurement of quantity independently of the units employed in the system of reference, even if the results are counter-intuitive. He insists that propositions of mathematics achieve a level of certainty of which our beliefs, if they are pressed far enough, would never be capable. Therefore, realizing that something is the case necessarily is the power different from presuming it to be so in judgement. This, as Plato suggests in the *Phaedo*, is the result of the division of body and soul, intelligible and sensible. We have memory of the intelligible world inscribed on our souls, but when the soul descends into the body and becomes disrupted by the incoming sensations, it forgets the Forms. This part of the two-worlds model is made clear by Plato in the *Meno, Gorgias,* and the *Phaedo*. But supposing Forms are radically different from the entities of ordinary experience and, moreover, separate from the world where the soul meets the body, why should we think that Forms are, ultimately, the cause of “being F”
— only improperly, though, considering that the notion of being is possessed fully by the Forms in the intelligible world — here in the sensible world?

The answer to this question lies in the fact that flipping the definition of “being F” to “being apprehended by the mind to be F” has opened to Plato the “royal road” to the Theory of Forms. Now Plato can ram home the argument that particulars, or the objects that are “caused” by the Forms, therefore, can only exist to the extent that they imitate the Forms. The expression “come to be <F>” is meant to express this “because if we are to speak accurately, we should say that such thing “never really are <F>” and so must find another terms beside “to be” to use with respect to them” (D. Miller 2003: 45). Since we recognize that things we perceive throughout the entire duration of existence change and strive to be like something else, but succeed in this only partially and imperfectly — which is to say that they come to be F, but never really are F\textsuperscript{34} — we must have had previous knowledge of that something else, namely, the Forms, \textit{eo ipso}. At the same time, as it warrants noticing, “it is from seeing such things as equal sticks” that we come to have a knowledge of equality (74b). But, and here is the upshot of Plato’s argument, we must have had knowledge of equality prior to when on seeing equal things we thought to ourselves, “All these things are aiming to be like equality but fall short;” that is, we would not be able to apprehend sticks as equal if we have not \textit{already} possessed knowledge of equality (75A) (Sallis 1990: 90-91).

\textsuperscript{34}“[P]lato thinks that strictly speaking, ordinary objects of experience never \textit{are} anything. Consistently with this, however, he can maintain that they \textit{are} F in some other sense. Hence, although what is coming-to-be F will never \textit{really} be F, it can none the less, once it has come to be F, temporarily be F, though of course not \textit{really} be F…. The sensible Fs, being subject to change in every respect, are never without qualification, for what is F without qualification could never change with respect to F-ness. Thus, the fact that the sensibles are subject to change in every respect explains why, once a sensible has come-to-be F, it none the less is not really F (though it is, to be sure, F)” (Code 1988: 54).
Plato does not make a separate argument to establish the existence of Forms because it can be known in the sensible world, through observance of its imitating of the intelligible world, that there are Forms. To recapitulate, it is the memory of our past knowledge the Forms which allows us to make sense of the world of change as an ordered whole to the best of our abilities and, in the long-run, to come to know beauty, truth, and virtue. When the soul is in the body, however, the access it can have to these things is constrained by many factors that make it confuse the two realms in sense-perception. But, fortunately for us, this world is a good home for the soul, where two contrary principles, namely, body and soul, can coexist harmoniously, which shows that a large part of things that are generated in the world of change, nonetheless, participates in the world of Forms to a limited extent.

So, this is a positive implication of the dichotomy of being and becoming for the character of the sensible world *pars pro toto*. There is something that allows the Forms to work as a cause and lets particulars be experienced precisely as things that remotely resemble the Forms in one respect or the other, for time being. Hence, the two Kinds of the *Timaeus*. When listing their attributes, Plato similarly draws on the power Forms to be a cause of the particulars to set them apart. Thus, although Plato emphasizes that the physical things that belong to the second Kind (images) are ontologically quite distinct from the things that belong to the first (paradigms), the two kinds, nevertheless, are “closely linked by virtue of the fact that the members of the second Kind “come to be F” because of their relation to the members of the first Kind” (D. Miller 2003: 45).
§17. Ramifications for cosmology.

I have stressed the implications of the dichotomy of being and becoming for the sensible world according to which particulars are ontologically contingent and exist by participation (*methexis*). It is none other than Form that, in the last analysis, are the things that can be said to be, possessing wholly the notion of being. Forms, such as that of beauty or justice, exist by themselves, within themselves, and only of themselves. They are singular, eternal, and universal and exist separately outside of the mind, in a pure state, in the other world. What exists in this world is due entirely to the Forms, since they are causes of the physically real’s. Thus, the physical world as a whole is separate from its intelligible counterpart. It is a mere replication of the pure Forms. Things that are generated and perishable never achieve a perfect imitation (that is not to say that they ever were capable of that in the first place), in virtue of which they remain at all times less real and pure.

At the same time, it is important to keep in mind that, in the *Phaedo*, we still cannot have a full knowledge of Forms in this life, but only after the body dies. Moreover, in death, the knowledge of Forms is not granted to any souls, unless during their time as human they have been made pure and uncontaminated by the body. To recapitulate, according to the principle of like-to-like, the soul *a priori* counts as pure because it comes from the intelligible world, which is pure, to enter the body where it becomes tainted. It is only through a purification of the soul that is achieved through a gradual separation of the soul from the body that one will be able to apprehend the pure forms.

Plato makes it a first-priority task to see through the testimony of senses that beyond the beliefs we form about the world the way things really are is not as
they appear. Because there’s no self-standing argument about the existence of
Forms to be made (at least, not in the dialogues that we’ve covered so far), what
we find in Plato is rather a logos which over and over again trades different
notions for essentially one and the same doctrine of truth and what it means to
have knowledge of something in general. The result is that, according to Plato,
true knowledge is conversant, not about those material objects and imperfect
intelligences which we meet within our daily interactions with all mankind, but
rather it investigates the nature of those purer and more perfect patterns which are
the models after which all created beings are formed. For that reason, throughout
his entire oeuvre, Plato tends to relegate nature of the phenomena — and by
extension everything that cannot be known by using reason alone — to a class of
truths subordinate to dialectic, things existing by participation, appearances
inferior to the really real.

Plato was resolved to defend the precedence of reason over the rest of
human faculties such as sensation at any cost. It is this point that finds in the
Allegory of the Cave (Rep. 514A-520A) a particularly vivid expression. Plato
suggests that truth is to belief what things themselves are to the shadows on the
wall. Many of us are ignorant in thinking that what we see is the only thing that is real. We are prone to confusing the real objects with imitations thereof in failing
to see beyond our own nose that we are trapped and played by the puppeteers in
the cave. One can find the way out to comprehend the objects in the broad
daylight, but one will inevitably wind up going back to the cave. Thus, human
beings will always return to the sensible world. Despite the occasional escape to
the other realm, the philosopher who understand the Forms is doing so whilst not
truly being alive; he is outside of the cave. So, Socrates says: “true philosophers are nearly dead” (*Phd.* 64B).

The account of the Theory of Forms I have presented throws light on the teleological dimension of the noetic and divine causes that makes a prominent appearance in the myth of the *Timaeus*. Plato makes Timaeus say numerous times throughout the dialogue that the Demiurge made the world that came to be beautiful and imparted order to its movements, which — in so far as the *telos* of things is concerned — is something that comes across in the earlier dialogues, as I have shown, though less explicitly. But it is not enough illuminate the relationship between the two worlds and the two Kinds of the *Timaeus* in their causal entanglement to show where the main innovations of the cosmology lie with respect to metaphysics of the Theory of Forms.

The members of the two Kinds of the *Timaeus* account for all things that are, that is, viewed with respect to “being F.” It follows that all things must of necessity be conceived of as either “being F” or “coming to be F.” Together these two kinds — “what is” and “what comes to be” — comprise everything, but the third Kind is neither being F (the first Kind), nor coming-to-be F (the second Kind) (D. Miller 2003: 40). This suggests that it ought to be impossible to say that it is anything at all. The third kind of thing seems to be something other than objects of the ordinary experience that are grasped by sensation as well as the intelligible Forms, which means that, on the two worlds theory, it would count as “nothing” in itself, pure “not-being.” This dilemma has led Derrida to argue in *On the Name* (Derrida, J. (1995 [1993]). *On the Name*. Stanford: Stanford University Press) that with the concept of *khôra* (Derrida’s term) Plato wished to invoke *tout autre* [fully other] (Caputo 2004: 37ff.) of being. Whereas the most astute of
Plato’s critics, pursing the stronger claim, argued that Plato made an attempt to say something about the third Kind, but ultimately failed, leaving it to others to develop notion of the Receptacle further. For that reason, Plato’s cosmology incurred Aristotle’s censure apropos that “What is written in the Timaeus is not well defined” (Aristotle, De Generatione et Corruptione II/1, 329A13). To settle these questions, however provisionally, I will launch a short foray into the Republic to make a final push for the assimilation of the Theory of Forms to the cosmology in the Timaeus.

§18. Ascent to truth.

We have broken off the reconstruction of the Theory of Forms at the point at which Plato has established that 1) all knowledge comes from recollection; 2) recollection is of Forms; 3) one cannot have full knowledge of Forms in this life. I begin by emphasizing that the epistemology of the Phaedo throws light on an aspect of the Theory of Forms that had been previously explored by Plato to a lesser extent. It consists in the fact that the Form of three and the Form of five, while each being a unique form in their own right, together share in the Form of oddness. It signals that there is a structure of the intelligible world that confers Unity upon the Forms in their Oneness, the ramifications of which it will be my goal to explain further. Arriving at the possibility of structure in the realm of the intelligible is one of the most crucial aspects of the two-words model that, as I will show, informs much of the development of Plato’s thought on Forms in the Republic.

Although Plato’s Republic is a treatise on politics, it is also a work of moral philosophy in which Plato’s reprimand of tyranny lands him at the tripartite division of the soul. With the soul being divided into appetitive, spirit-seeking,
and reasoning parts, Plato can no longer assimilate the soul as a whole to the 
intelligible world on the basis of the principle of like-to-like because he will want 
to argue that firstly an effort must be made in order to transform the soul to 
become akin to the Forms in one of its aspects, namely, the reason. To that end, 
Plato establishes a further contrast between pure realities and abstract realities, 
arguing that the soul can leave the body to contemplate the abstract Forms for the 
limited lengths of time when it turns to the study of abstract mathematics. 
Education is viewed as a miniature version of the transmigration of soul to the 
intelligible realm that awaits the knower after death.

Although knowledge fundamentally remains a product of recollection, as 
the Allegory of the Cave (Rep. 514A-520A) teaches us, the knower is now 
allowed to move back and forth between the two worlds. As a result, due to a 
more recent apprehension he will no doubt be able to have a better and a more 
‘acute’ recollection of Forms than somebody who remembers them only remotely 
from the prior life. To draw a parallel with the Phaedo, in the Republic, Plato 
abandons the idea that the Forms are apprehensible “with the soul by itself,” while 
claiming, instead, that the Forms are apprehended via an abstract soul.

One could argue that this is an improvement from the Phaedo. For Plato 
lifts up the ontological constraints that were imposed by the theory of knowledge 
as recollection on the scope of reason, with reason now being able to focus 
exclusively on studying the Forms and spirit on separating the soul from the body. 
Being a spokesman for the immortality of the soul, Plato previously had Forms 
help him surmise the goal of philosopher that, to wit, amounted to soaring above 
the world of change and ordering his or her life accordingly. However, in the 
Republic, things change drastically as Plato now views the possession of
knowledge of the abstract Forms as specifically indispensable to every good ruler. Keep in mind that Plato’s argument here rests on the assumption that knowledge and ignorance are divided in relation to what is and what is-not with the opinion being intermediate between them. A good ruler will, on Plato’s account, be driven by his love of Forms to set up a constitution based the paradigm of the ideal city laid up in heaven that can be broken down into some kind of combination of Forms of pure justice and law.

In general, in the *Republic*, there is a growing tendency to see knowledge of virtue and truth not merely as the products of recollection of past lives of the soul, but also as a kind of power which lets us live most happily. In other words, there is a shift to viewing reason as the ability to understand what each thing itself is in itself and by itself through the study of dialectics and a kind of thought that holds before itself the abstract Forms (like mathematics). Consequently, the attaining of wisdom becomes synonymous with engaging in goal-oriented activities, the most treasured and most demanding of which, in terms of expertise it requires, is being a philosopher-king. By the same token, whereas previously it consisted in “shutting off of the senses,” roughly speaking, now the path to truth lies in gradually moving away from a technical sort of activities to that kind of activities that require from the one who engages in them the exercise of reason to a greater extent.

Plato mentions mathematics as an example of kind of activity that falls in the latter category. This serves to highlight that the dichotomy between being and coming-to-be is not as categorical as some people read into it, with anything that falls short of the clear and exact thinking of Forms being untrue and false, as it were. I will argue that Plato’s thought on Forms, and especially what he writes in
the *Republic*, allows for a more nuanced understanding of the degree to which the knower has succeeded in separating soul from the body than the dichotomy between parts of the soul amenable to being persuaded by reason on the one hand and the animal appetite on the other suggests.

For this would imply that there are sorts of activities that are harmful to the spirit (*thumos*) and do nothing else than hamper the development of the abstract soul. I believe that if there were activities to which Plato was indeed opposed in part or in full, as his critique of art in the *Republic* indicates, they would have to be dealt with one by one, rather than singled out as a whole by some sweeping generalizations. Plato recognizes that there is only a small fraction of people who are suited from birth to become members of the “golden” class of the society, whereas the majority will only deserve being called by the names of the less precious metals to the end of their lives, in which there is nothing shameful *per se*, as Plato would have us believe. So, there is a virtue in doing mathematics, so long as it is the occupation of the “silver” class of people, for its own sake, rather than a destiny of an up-and-coming philosopher who fails to master his or her appetites in a pejorative sense.

But, Plato takes it even further and asserts that a subset of those who study abstract mathematics would also be allowed the further pursuit of dialectic — for the reasons I will indicate below — in case it doesn't go against the inclinations of their spirit and granting that they are at home in learning axioms and carrying out calculations. The latter Plato calls *dianoetic* thinking, which involves assuming hypotheses while making use of likenesses, always moving towards final conclusions, while the highest cognition of reality corresponds to *noesis*. It involves understanding, or pure thought, the goal of which is the opposite of
mathematics, namely, to examine all hypotheses by the dialectics while eschewing likenesses and always moving towards the First Principle, the ‘unhypothesized principle,’ as Plato calls it, that is, the Good itself. Plato brings the division between knowledge and belief together in the Divided Line analogy (509D-511E), where he provides a definitive diagram of the two worlds and how humankind can apprehend the intelligible realm. As Guthrie explains: “Short of it, Plato now believes, the philosopher lacks complete understanding of reality — that is the Forms — though they can be completely understood in conjunction with the first principle of all (511D), which is of course the Good itself” (Guthrie 1975: 509). Thus, far from the ideas present in the Phaedo and other works, the philosopher can know the Forms in life.35 I will turn to a discussion of the Good to ground Plato’s claim that the philosophers are best fit in the Theory of Forms and wrap up the analysis of it.

The Form of the Good comes to Plato’s aid in making the structure of Forms in the intelligible world play a part in the epistemology. The Form of the Good is treasured more than any other Form by Plato because the Good confers unity upon both of the orders of existence and thus sustains the elaborate mechanism of participation working the way it does, i.e., enabling “everything that ‘comes to be’ to go forth in the stability of its stable duration” (509B). As Sallis puts it, it names “shining forth of being in the midst of the visible” (Sallis 1990: 53). To understand just what the concept of the Good entails, consider these two Forms: Truth and Beauty. Both Truth in itself and Beauty in itself cause

things that are beautiful or true that participate in them “be F,” in a qualified sense. The same holds in the case of the Good. Now, since both Truth and Beauty are Good things, while each being its own Form, they share in the Form of the Good as well. It follows that the form of the Good is separate from and superior to the Forms of Truth and Beauty.

Just as the Forms are conceived of as the cause of the particulars, so the Form of the Good “causes” the Forms themselves. In Heidegger’s interpretation, which I for the moment adopt, the Good constitutes in addition to the structure the hierarchy of Forms in the intelligible world, with it being the “highest” Form, the Beauty and the Truth next-to-highest and so forth. Plato identifies how the form of the Good allows for the mind to understand such difficult concepts as justice. He identifies knowledge and truth as important, but through Socrates (508D-E) says, “good is yet more prized.” He then proceeds to explain “although the good is not being” (509B) it is “superior to it in rank and power,” it is what “provides for knowledge and truth” (508E). In essence, Plato suggests that justice, truth, equality, beauty, and many others ultimately derive from the Form of the Good. It plays such an important role because both the particulars and Forms have their being in and through the Form of the Good.

Through the conversation between Socrates and Glaucon (508A-C) Plato analogizes the form of the Good with the sun, since it is what allows us to see things. Here, Plato describes how the sun allows for sight. But he makes a very important distinction, “sun is not sight” but it is “the cause of sight itself.” As the sun is in the visible realm, the form of Good is in the intelligible realm. It is “what gives truth to the things known and the power to know to the knower.” It is not

36 See footnote 35.
only the “cause of knowledge and truth, it is also an object of knowledge,”
though, properly speaking, it is not knowledge itself and from the Good, things
that are just, gain their usefulness and value. However, although humans are born
to pursue the Good in this life, no one can hope to make any real progress in
finding out without philosophical reasoning. At the same time, the point that I
want to stress is that even though nature of the Good is “being F” at all times, it is
not just an object of reason.

As Plato explains: “The Form of the Good adds truth to what is known
[explaining their essence and existence] and gives the knowing subject the power
to know, but is itself more beautiful than truth or knowledge… and must be
honoured more than them” (509A). This makes the Good a super-Form of sorts
because the Good, as Plato claims, “for all people is the original source of both of
all that is right and beautiful” (517C). 37 It constitutes “that without which” visible
things would “not” be perceivable and “that without which” intelligible things
would “not” be graspable. It is not difficult to see that this implies that the Good
somehow determines the contents of the world of Forms and makes it ordered
through and through, everything in it being there for a purpose. In the words of D.
Miller, since she can explain it better than I will be able to:

In the Republic’s famous Sun Analogy Plato first distinguishes two εἴδη of things that have quite contrary attributes: visible things that
“are seen but not grasped by the mind” and Forms that “grasped by the
mind but not seen” (507B9-10). He also distinguishes a “a third γένος”
(507C11-D1, E1), a third kind of thing, in the presence of which
(507E1) and because of which (508B9-10: the word used is ατιός)
sensible things (which belong to the first kind) are perceived and
intelligible things (which belong to the second kind) are grasped by
the mind. Two things mentioned that belong to this third γένος: the

37 See Heidegger, 1998, 155-82: “The [idea of the good] is the origin, i.e., the original
source [Ur-Sache] of all “things” [Sachen] and their thingness [Sachheit]. “The good”
grants the appearing of the visible form in which whatever is present has its stability in
that which it is. Through this granting, the being is held within being and this is ‘saved.’”
Sun and the Form of the Good. What these two very different entities have in common is that they are causes. The sun is the cause of the visibility of the visible things, and the Form of the Good, we are told, is the cause of the intelligibility of intelligible things. In this passage the two εἰδη are conceived of as opposites: what is visible and what is not visible, or what is not intelligible and what is intelligible. The third γένος, on the other hand, is something quite different: it stands apart from their opposition (i.e., qua being a different kind: obviously the sun is visible, the Good intelligible) and is conceived of as having the relation of cause with respect to the other two εἰδη (D. Miller 2003: 39).

In the excerpt from her book that I have just quoted above, Dana Miller shows that the Republic sets the precedent of thinking something that does not serve as a member of other formally delineated classes, but rather forms differently from them a third γένος. Here as in the Timaeus, when Plato separates out a γένος that is distinct from the other two kinds of things it does not of necessity entail that there be independently existing things that are members of the new γένος and somehow different from the things that fall under the other kinds. As it warrants noticing, the distinction between things grasped by the mind and the Good itself is a product of a purely conceptual distinction. Recall that, strictly speaking, on Plato’s account, there can be no things at all that are not either the objects of opinion or reason, because Plato explicitly says that “nothing is darker than what is not or clearer than what is” (Rep. 478C6-8).

Thus, when Plato says that the Good is not being (‘but superior to it in rank and power,’ so the sentence goes), he does want to suggest that the attributes of the things that are said to be always just one F (Form) do not hold in the case of the way in which the Good itself is, but rather that the Form of Good differs from all other Forms in more than one parameter. That is, the Good expands our understanding of Forms, in effect forcing us to move it into that third kind of thing with its own specific attributes, for instance, causal relation to the other two kinds.
Again, the difficulty with expressing all these distinctions is that are no fixed names, no words, commonly used to denote any of the kinds of things that Plato will want us to believe there are, for better or worse reason. Let these remarks then suffice to serve as a remedy, however satisfactory, for the genuine puzzlement that Plato’s talk of the three kinds of things in the Timaeus may cause. I do not claim that it rescues the concept of the Receptacle from the accusations of Aristotle, but I think that a great deal of conceptual clarification has thus been achieved, because now we see how Platonic metaphysics could let something like the Receptacle and chōra be and, at the same time, not be members of the other two cosmological Kinds of the Timaeus.

What is important to take from the discussion of the Good for our purposes is that by Plato’s logic real knowledge becomes, in the end, a knowledge of goodness; and this is why philosophers are in the best position to rule. The one who has philosophical knowledge of the Good is the one who is fit to rule. For that reason, Plato has the philosophers in the Republic instruct ordinary people on the best way of life that they are capable of. Coming to the apprehension of the structure of the world of Forms — in their inter-connected relations that obviously extend not only to the Form of the Good, but involve many Forms at once — through a cultivation of the abstract soul, the philosopher is the best candidate for making the world be a fuller and, perhaps, more perfect imitation of the eternal Forms in the ethical and political spheres of life.

38 “The society we have described can never grow into a reality or see the light of day, and there will be no end to the troubles of states, or indeed, my dear Glaucon, of humanity itself, till philosophers become kings in this world, or till those we now call kings and rulers really and truly become philosophers, and political power and philosophy thus come into the same hands, while the many natures now content to follow either to the exclusion of the other are forcibly debarred from doing so. This is what I have hesitated to say so long, knowing what a paradox it would sound; for it is not easy to see that there is no other road to real happiness either for society or the individual” (473D-E)
While Plato grants to the philosopher the ability to fully understand the Forms, so long as he or she is guided by the Good, arriving at the true knowledge remains confined to the routes of recollection. Because he or she is therefore not truly alive and “outside the cave” in the mental devotion to the Forms, the philosopher, so to speak, serves as a conduit between the impeccable world of Forms and its lesser version here. Plato’s argument is that knowing the realm of reality, “where all is reason and order,” in Guthrie’s expression, the philosopher will then apply it in this life as “a pattern for remodeling society… his mind is fixed on the immutable realities of the divine order, he alone can order human affairs according to the highest standards” (Guthrie 1975: 502). That is to say, “Through a continual life of contemplating the Forms by means of abstracting the soul,” the philosopher develops the ability for organizing the physical realm in such a way as to “most closely liken the purity and structure of the intelligible realm.”


The past several decades saw a great increase the interest to the Timaeus and its place among other dialogues in the circles of Platonists. Many of Plato’s commentators have argued that the key to understanding of the Timaeus is to see it jointly with Parmenides. A common complaint raised against Plato is that he was committed to defending the ontological implications of the theory of knowledge as recollection for the sensible world (that is, the dichotomy of being and coming-to-be) so much that he would not count as a serious problem what discrepancies it could generate, if he were pressed with some uncomfortable questions by someone of comparable intellectual firepower. And that is just what is the main topic of one of the most notorious of Plato’s dialogues Parmenides, where the
foundation of what can be called the Theory of Forms in the shell is taken away by Parmenides’s cross-examination of young Socrates.

It reveals that some of the positions to which Plato subscribes himself in erecting the Great Chain of Being, to use Lovejoy’s term, are plainly and simply untenable. That is to not say that Parmenides outrightly demolishes the Theory of Forms in germ. Rather, Plato himself demonstrates awareness of the limitations of his own theory, especially in the province of ontology as regards the proposition that universals exist independently of particulars that more often than not is claimed to be a necessary implication of the Theory of Forms. He manages to put in words what he perceives are some of the weak spots and blind alleys in it and write them down in the form of the dialogue, without making an attempt, however, at the refutation the whole.

In the *Parmenides*, Plato casts doubt over whether it is right to say that particulars exist by participation in Forms. It contains the famous Third Man argument, which threatens to push the claim of uniqueness of Forms in respect of “being F” on the brink of the bankruptcy and makes the structure the intelligible world disappear in an infinite regress in the following way. Parmenides points to the ambiguity of the meaning of the “participation” of an object in a Form. The young Socrates conceives of his solution to the problem of the universals, which though wonderfully apt, remains to be elucidated: “Nay, but the idea may be like the day which is one and the same in many places at once, and yet continuous with itself; in this way each idea may be one and the same in all at the same time” (*Parm*. 131). But exactly how is a Form like the day in being everywhere at once? The solution calls for a distinct form, in which the particular instances, which are not identical to the form, participate; i.e., the form is shared out somehow like the
day to many places. The concept of “participation,” represented in Greek by more than one word, is as obscure in Greek as it is in English. Plato hypothesized that distinctness meant existence as an independent being, thus opening himself to the famous regress argument of the Parmenides, which proves that Forms cannot independently exist and be participated.

According to one line of interpretation, what Plato may be seen as doing in the Timaeus is limiting the philosophical import of the two-worlds model to the early and middle dialogues in order to avoid the seemingly insoluble difficulties posed by the Parmenides to the Theory of Forms. It is contemporaneous with the popular belief that there occurs a break in Plato’s thought on Forms around the time of writing the Timaeus, which Plato wanted to conceal to hide the embarrassment. This view rests on a specific reading of the Parmenides that takes the Timaeus to be Plato’s attempt to save the Theory of Forms from total disaster by adding a third kind of thing (the Receptacle) and leaving behind the two-worlds model. That is to say, it posits that what we should be looking for in the Timaeus is, fundamentally, an alternative to the two-worlds articulation of the dichotomy of being and coming-to-be, or, what’s the same, of the radically contingent, dependent, and non-self-sufficing being of sense-objects.39

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39 Mitchell Miller exemplifies the conclusions to which this view ultimately leads in this passage: “Socrates need not have agreed that because a particular, “resembling” (132D3) and “made in the image” (132D4) of a form, is “similar” (132D7) to it, the form must also be “similar” (132D6) to the particular. It was accepting this last point that made Socrates vulnerable to the Third Man Argument. But he might have insisted on the difference in kind between a model and its likeness, in effect agreeing in advance with Parmenides’ conclusion, namely, that it is not “by similarity” that a particular participates in a Form even while saving the simile from the reach of Parmenides’ argument. To this should be added the observation that in returning to the model/likeness simile in the Timaeus, Plato gives himself an occasional once to secure this difference in kind and to explore an issue crucial to the physics, as it were, of the form/participant distinction. An image differs from its original by depending on some medium; thus, in the familiar cases in the Republic, shadows depend on the play of light on a surface, and reflections depends on
From the perspective I have just sketched out, there emerges a pleiad of authors, who in the past several decades have been extremely productive in coming up with inventive arguments supporting a commonly held, if not to say orthodox, view that the purpose of the Timaeus is to account for some of the blinds alleys and weak spots of the Theory of Forms that the Parmenides cracked open. Now something that the Theory of Forms absolutely cannot do without is

water or whatever shiny, fine-grained surface bears them. Plato has Timaeus secure the difference in kind of forms from the particular by calling attention to this dependence (51B-52D, especially 52C), and in the process he gives himself occasion to develop the crucial notion of the ‘receptacle,’ the obscure medium that “receives” the “imprint” of the forms (50B-51B) and so lets particular be.’ (The word ‘sensible’ has been substituted for ‘particular’ because these words are really interchangeable.) (In Reydam-Schils 2003: 18)  

40 See Cherniss, 1944, 172-3: ‘It is to save the possibility of sensible phenomena as such, the essential characteristic of which is instability and which, because they have no steadfast being of their own, must be imitations of the real ideas, that Plato assumes a receptacle, chôra; this receptacle is the field required by phenomena because they are merely ‘likenesses.’” Cherniss, 1945, 23 again: “Plato himself explains that this theory of space as the participant or receptacle is a consequence of his doctrine that physical particulars, being constantly in process, are imitations of reality, for as such they imply not only real entities — that is, the ideas, of which they are images — but also a field or medium in which they can, as images, appear and disappear.” Lee, 1966, 342-3 (cf. 361) reads Timaeus 48E2-52D4 as ‘one of Plato’s major and most careful metaphysical pronouncements — a fundamental statement not only on the notoriously obscure Receptacle, but on his entire metaphysical theory of phenomenal being.’ For Lee, 1966, Timaeus 48E2-52D4 establishes an ontology of the insubstantial image that rescues Plato’s metaphysics from the regress arguments of Parmenides 132A1-B2 and C12-133A7 (361-3). Algra too in his nuanced 1995 study is inclined to see Plato’s ‘overall perspective’ in the Receptacle-passage as ‘metaphysical rather than physical,’ and as offering a way of conceiving of methexis (Algra 1995: 76; 91; 95; 105-6; 118). (Waterlow (=Broadie), 1982, 349-50, also see the problem as one of general ontology, though to a lesser degree.) Sayre, 1983, 238-55; cf. 13-14 sees the Receptacle passage as an ontological exploration (as distinct from a finished doctrine) in which Plato experiments with a figurative answer to ‘the problem of participation’ imported by his earlier ontology of particulars as images of separate Forms. See also Sayre, 2003, 198. Fronterotta, 2001, 390-1, locates the problem for which the Receptacle is supposedly a solution in the separateness of Forms (cf. Parm. 130B1-3); according to Fronterotta, separateness at Parm. 133B4-134E8 implies that particulars and Forms can stand in no relation at all; hence participation is impossible (278-83). According to Kahn, 2007, 38, one of Plato’s projects in the late dialogues was to reformulate his metaphysics so as to avoid the Parmenides objection to ‘participation,’ and the solution is in the Timaeus if it is anywhere. Silverman’s 2002 interpretation of the Receptacle is no less ontological — it sees the Timaeus as ‘propounding a theory of particulars’ (292), particulars as such being with the Forms as such (15-22; 246-84) — but it is distinctive in discerning complementary accounts of particulars, one at the first beginning, the other involving the Receptacle and the geometrical shapes of the Platonic solids (273-82). I am indebted for
the notion that the sensible particulars can never be the proper objects of knowledge. Accordingly, one of the most prevalent trends in the study of the Timaeus of the recent days has been to look at the third kind of thing (receptacle, chōra) as somehow fulfilling the metaphysical requirements of the general Platonic ontology of Forms (paradigms) and imitations (images). For this interpretation, one will take it that “the problem to which the Timaeus is a solution, or the unfinished business which it carries to completion, is first to be found in that ontology” (Broadie 2012:199). The running assumption here is that it does not arise from any specifically cosmological source. That is, the relation of the Receptacle to the cosmology is like that of the paradigms-images (27D5-29B2) contrast: it is called for a gigantic lip-service to the cosmological enterprise, but in view of all that still does not originate in a demand peculiar to that context (Ibid).41

One such an attempt at reading the Timaeus this way has been undertaken by Cornford in his 1935 extensive study of the text. His way of making the point was to emphasize that the Receptacle is supposed to re-inscribe the ontological frailty of the images par excellence, because even “that in which” they come to be and “that without which” they would “not” be able come to be in the first place is admirably documenting all the different strands of Platonic scholarship in the recent years in a concise and clear fashion to Broadie, 2012.

41 For a note of dissent see Solmsen, 1942, 41: ‘There is little to be gained by seeing, in this new concept of space, Plato’s answer to criticism levelled at his earlier theory (or theories) concerning the relation between the Forms and their counterparts in the visible world.’ Solmsen continues: ‘The origin of the departure eludes us…’
not their own and, strictly speaking, is separate from them.\textsuperscript{42,43} So, Cornford suggests that in the Receptacle passage, “Plato comes nearer than anywhere else in the \textit{Timaeus} to the problem of the \textit{eidolon} [image]. He contributes towards the solution an important factor which did not come into view in the \textit{Sophist}. Space, as eternally self-existent, provides the copy with a ‘room’ or situation where it can ‘somehow cling to existence’ as \textit{ὅν πως;} and escape being nothing at all” (Cornford 1997: 196). (The \textit{Sophist} reference is to 240A7-C5, where the \textit{eidolon} is paradoxically displayed as not really being [sc. what it is of], although it \textit{is} ‘in a way’ and really \textit{is} an image.) As is evident, that approach is characterized by extracting from the Third kind attributes that will make its members (receptacle, \textit{chōra}) restore in one way or another the fundamentally asymmetric relation between Forms and images after the eclipse of the separateness of Forms in the Third man infinite regress. To give you just another example, another way of espousing basically the same general approach to the interpretation of the Receptacle is by looking at it from the point of view of the problem concerning the nature of ‘participation’ and the complex and, apparently, rather autonomous mechanism regulating the participation of sensible particulars in Forms.

At any rate, all these projects are united and coordinated in the argument common to them all that in the Receptacle we can find a however successful a

\textsuperscript{42} See \textit{Tim.} 52C: “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… the image should therefore come to be \textit{in} something else, somehow clinging to being, or else be nothing at all.”

\textsuperscript{43} Still another approach that is liable to the following objections emphasizes that Plato wants to show with his cosmology that “there has to be something that metaphysically differentiates the Form from its images, the sensible particular, and the difference is that the latter, not the former, is \textit{in} something other than itself; now this thing-in-which cannot be the Form (a sensible cannot be in a Form), hence it must be a third kind of thing” (Broadie 2012:199). For a version of this interpretation of the Receptacle, see Patterson 1985, 7 and 87 ff.; Brisson 1998; 177, 195-7; 202; 207 and 2006, 218; Sallis 1999, 122-3.
solution, however successful or unsuccessful, “to the problem generated by Plato’s pre-existing commitment to the dualism of Forms and sensible images” (Broadie 2012: 200) that I have framed as dichotomy of being and coming-to-be in the ontological province of Plato’s metaphysics. The single most important aspect in which they differ is just what that they believe exactly is the problem with the Theory that Plato wants to solve in the *Timaeus*, with some seeing it more in terms of the ontological status of the particulars itself (given that they are not really real) and still other in terms of the relationship of the images to the paradigms.\(^{44}\) All these critics have inadvertently seen in Plato an anticipation of Aristotle’s later formulation of form-matter distinction in a shell.\(^{45,46}\) For their devotion to extracting from the cosmology some metaphysical propositions that, peradventure, cannot be totally assimilated to the two-worlds model, Broadie has christened this approach to the interpretation of the Receptacle that they employ “an ontological interpretation” of the Receptacle.

In “the ontological interpretation,” one simply takes “the existence of the third kind of thing as the *sine qua non* for the being of the perceptible, and from this deduces that the perceptible thing has the metaphysical-image status” (Broadie 2012: 204). I find this view deeply problematic, but I cannot argue for it

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\(^{44}\) At 50C6 *Timaeus* says that ‘we shall return on another occasion’ to the hard-to-articulate and wonderful way in which the copies in the Receptacle are ‘imprints from’ the Forms. No subsequent passage in the *Timaeus* clearly takes this up. Taylor, 1928, 324-5, that that the phrase may be a ‘polite formula for the dismissal of a subject,’ but also suggest a possible reference to the unwritten doctrine of the One and the Dyad. Some (e.g. perhaps Gadamer, 1980, 173) see here a postponement or setting aside of the problem of participation itself. If that’s correct it seems unlikely that the Receptacle is put forward as the *solution* to that problem (Broadie 2012: 199)

\(^{45}\) Many older commentators, and non-Continental authors, such as Henry Mendell, tend to read Plato through the lens of modern science (from Newton on). They thus try to map either Plato onto modern notions of ‘space.’

\(^{46}\) Mohr, 2005, 88: “The formal reason for the introduction of space, on Zeyl’s account, is to serve as a principle of individuation and a substrate for change.”
here because this chapter has already exceeded what it was called to demonstrate. I concur with Broadie who claims that in studying what I have provisionally called in the first chapter “the second tale,” or the second discourse of Timaeus, that is, a discourse on what comes about of Necessity, one ‘should look at all the themes, however ‘metaphysical’ nature of some of them might be, through the lens of this question: what do they contribute to cosmology?’ (Broadie 2012: 185). Accordingly, in the next chapter, I will have a chance to spell out more clearly the cosmological underpinning of the twofold of the paradigm-product. Also, I will argue that the Receptacle has a particularly important part to play in Plato’s somewhat cumbersome assertion of the principle *ex nihilo nihil fit* (‘nothing comes out of nothing’), on which his cosmology rests through and through. I will show the Third kind of the *Timaeus* is a well-timed cosmological development, since it serves as an antedated refutation of the hypothesis that the cosmos went through a spontaneous generation, came out of nothing, and therefore has no origins at all (which is totally contrary to Plato’s logic, but at least the possibility of which he has not yet excluded as of 27C4).

To conclude, “the ontological interpretation” might have a case that in the *Timaeus* Plato holds back the theory of knowledge as recollection, for many reasons. For example, in the *Timaeus*, after death the souls are said not to travel to any kind of the other realm of the intelligible Forms, but rather have an option of either returning to their “home stars” or continually going through a cycle of degeneration and being reborn as a woman, then as a bird, a fish, and so on, presumably until they step again on the path of virtuousness in life (41D-42D). In this, Plato has to posit that our ability to reason intelligently about things stems from the fact that our souls are parts of the World Soul, the nature of which allows
it, as we know, always to make unerring judgements regarding the Same and Different in all things that it meets. Plato even reinforces the epistemological account of knowledge espoused by him on that occasion by arguing that if ‘anyone should ever call that in which understanding and conviction arise, not soul but something else, what he says will be anything but true’ (37C). By a way of remark, let me point that that alone, however, is not enough to ascertain with a substantial degree of trustworthiness and precision that in the *Timaeus* Plato ceased to regard as Forms “concepts or objects to which he had previously assigned that rank” (Runciman 1959: 152). After all, Plato comes nearer than anywhere else in the *Timaeus* to giving us something that, at least, remotely resembles a proof of the existence of Forms (see Tim. 51B6-52D4).

For in the absence of a however persuasive proof of the existence of Forms, Plato’s ethics, as of time of writing the *Republic*, hinges on there being the Form of the Good, as I have argued above. Plato’s investments into politics comes at the price of subsuming happiness to possession by the philosopher-king and instilling to his subjects of the philosophical understanding of the true nature of the Good, which requires one to be a virtuous person (a combination of sound-mindedness and justice). Plato binds together the good of the individual and the interests of the society as a whole, especially the laws that would be set up by the philosopher-king for the best of the life of the *polis*. The offset of this is that, as a result, the second-best option in the case if the laws have not been settled in a knowledgeable fashion is to stick to whatever laws there are (for it is better than having no laws at all). However, this by itself is not capable of guarantying any human happiness. To the contrary, sticking to laws that are only half-true (and
thus half-false)\textsuperscript{47} “can at most guarantee temporary survival, not the self-fulfilled happy human life” (Carone 2005: 11). It isn't hard to see that the very postulates that allow for human happiness in the ideal State can be a great limitation of it in less fortunate conditions.

Carone suggests that Plato’s moral philosophy is indeed capable of generating the internal conflicts that are insurmountable so long as the framework of the Republic is concerned. To name just a few, how necessary is the State of the Republic for the individual to attain happiness and virtue and can happiness for the many be secured in the political condition that are from being ideal? In light of this, Plato’s move to cosmology comes handy, since it helps to achieve a great deal of conceptual clarification in the matters of ethics and what counts as a happy life. For Plato does seem to believe, as Carone puts it, that it is the rationality governing the planets and stars that ensures that they do not err in their path and that this rationality pervading the universe “establishes the foundation for a system of natural justice on which human can rely” (Carone 2005: 6). Thanks to the existence of the rational order in the universe, it is possible for us through studying it, step-by-step, to attain happiness in this life “without necessarily knowing the Forms or being dependent on one who does” (Carone 2005: 12). It can be seen as an affirmation of the principle that, in the last analysis, humans should aim to be ‘actively using their reason in harmony with the universe’ (Carone 2005: 13) in the way formally delineated in the Timaeus. In any case, for

\textsuperscript{47} In the Republic, no deviations from the ideal in the pattern of legislation set by the philosopher-kings are to be tolerated at any rate because they necessarily bring about the degeneration of the constitution all the way down to moral corruption of the citizens and eventually collapse of the State
Carone, “this represents a continuation of, rather than a break with, his ethical
preoccupations in the early dialogue” (Carone 2005: 7).
Chapter IV. Cosmology and the Third Kind

*Duplication of beginnings – Pre-Cosmos – Artisanal metaphor – Whole and parts of cosmos – Character of the material – Necessity again – Motion – Nature of the Receptacle*

§20. *Duplication of beginnings.*

Plato’s treatment of the Third kind in the *Timaeus* has earned him respect from some and opprobrium from others, but few have managed to stay indifferent to it. Plato is often criticized for breaking the symmetry of the two kinds in the cosmological picture of the *Timaeus* without making in his philosophy any follow up adjustments to the metaphysics which the third kind of thing calls for, whatever it may be. People who hold this view more often than not take the Receptacle as a metaphysical experiment conducted by Plato that was eventually superseded by more agreeable theories appearing in later dialogues (Miller). However, I will argue that rather than being a literary invention confined to the *Timaeus*, the incarnation of the Third kind in the Receptacle is an anticipated turn of the Timaean cosmology and a climax of the entire dialogue. I will start the analysis from the point at which Timaeus’s account reveals that the Intelligence has to have persuaded Necessity.

Before Necessity was introduced in the dialogue, Plato has employed four kinds of the elements to explain the generation of the body of the world and mentioned the rays of fire in specific as the auxiliary cause of vision. It is precisely in reference to that small part of his discourse that he now observes that ‘we speak as if it were known what fire is, as well as the other elements, taking these four as beginnings’ (Sallis 1999: 94). This is an obvious reference to materialist theories that were espoused during Plato’s lifetime by his students in
the Academy, who, in a sense, subscribed to Pre-Socratic teachings about Nature as endowed with the spontaneous power for generation of things, as I have shown in chapter II. Plato tells us that they compare fire, water, air, and earth to the letters of the universe and take them to be the absolutely first principles of all things (48B), which causes unease for cosmological model that he is advocating. At this point, it becomes evident to Plato that he cannot make any progress in his account unless he rectifies common misconceptions about the nature of fire, etc. Plato would not have it that the elements are something that once it is in place then the world-order comes about, as it were, of necessity. (For Plato it would be a blasphemous thing to say so.) Quite the opposite, he insists that the elements do have a generation and, moreover, as it bears emphasizing, “their generation, even if never yet disclosed, will certainly have deprived them of the status of beginnings” (Ibid.).

Thus, Timaeus sets the limit to the transformative activity of the Demiurge in order the remedy ill-treatment that befell parts of the discourse of the cosmic production in the following discussion of the properties of the elements that allowed them to make contributions to Reason in their own peculiar way as they were even before the heaven came to be (48B5-7). Some qualifications to the Timeaen cosmology are indeed necessary, since when Timaeus first proclaimed that the Demiurge authored “this All,” he knew that at some point his audience would run into trouble in following his account. For without any credible argument, Timaeus planted into the likely story the principle ex nihilo nihil fit that we had to grant quite casually to him on the grounds of the distinction between things that have beginning in time and eternal things. Then, Plato classed the universe as being among the former, but without anything that we could call a
good argument. It was said that since the heaven did not exist forever, the universe must have a maker, and since it is beautiful, it must have come to be by the best of all causes, implying that it could not find its way to the light of the day in the shape it has assumed today by itself, because that, on his account, would amount to nothing less that then the creation *ex nihilo.*

To leave behind the creation *ex nihilo* — with its specifically biblical connotations that are very far from what the Demiurge is like in the Timaeus’s myth of the creation — any theory would do, but how successful it will prove to be remains open to question. One of the challenges to the story Timaeus is telling is to explain how the Intelligent cause keeps its sovereign right over the generation of all things when the workings of Intelligence are broken down into many pieces that have a relative autonomy from one another, in contrast to the heaven that as one works like a natural measure of time, on Plato’s account. The issue is one of how to simultaneously hold that the Intelligent cause is in some sense the cause of the cosmos as we find it while also imputing Intelligent causation more locally. For it is one thing to say that there is an intelligent design to the world as a whole, but stating that it is the same design that we observe in heaven as well as in ten thousand of things on earth is a much more controversial claim and requires clarification on Timaeus’s behalf.

For that reason, Timaeus interrupts his discourse to demonstrate, on the one hand, what road it is that he is about to go down in his account next and what claim, on the other hand, it is to which he does not intend to lend support. I surmise that the direction in which he could go is to argue that no matter what events took place in the past it is the Demiurge who wanted it that way and that, therefore, everything that happens to us on the Earth occurs for a good reason. As
it is evident, this is a deeply problematic view to defend. For what does it mean to say that a hurricane or tsunami and the distress they brought to the inhabitants of the land which they struck were divinely sanctioned by the Demiurge? If Timaeus were to travel down this road his likely account would classify at best as dodging the real question these phenomena pose to the cosmological model of Intelligent Craftsmanship by changing the subject. At the same time, there are some things which it would be impossible to attribute to Intelligence at all. Suffice it to recall Timaes’s statement that Intelligence had to persuade Necessity to direct everything towards what is best (48A).

It is in order to stipulate a more nuanced understanding of cosmos that Timaeus has to backtrack in his discourse and to resume it at a different starting point that is more accurate because it brings to light as much as it is possible in its nature the third kind of thing. In that sense, listing the Necessity as the contributory cause of the genesis of cosmos launches a discussion of a kind of thing that is — to be said as and by its place in discourse — another kind of beginning that the Timaean cosmology needed, a kind of kind beyond kind, a third kind. It serves to qualify that the nature of the elements did not pertain to the work of the divine mind and that the generation of the elements precedes and, by the same token, limits the activity of the artisan god, because natures of fire, water, air, and earth are, properly speaking, outside of the jurisdiction of Intelligence.

Timaeus’ first discourse proves, then, not to have begun at the beginning: by beginning at that point where the god took fire and the others and set about making the cosmic body, the discourse got ahead of itself; it proves to have been ahead of itself from the beginning. Now it is incumbent upon Timaeus to make a different beginning, one that would begin at the beginning. Now what is required is a palintropic move: Timaeus must let the alleged beginning collapse into an earlier beginning, that is, he must turn back to what was passed over by the first discourse. By turning back to the prior generation of
fire and the others, his discourse will attempt now to catch up with itself (Sallis).

After all is said and done, the duplication of beginnings in Timaeus’s discourse does not suggest that one beginning is true and the other is false. In spite of the interruptions, Timaean cosmology is consistent between the two discourses. We should not take the disruption sowed by the Third kind in the *logos* of Timaeus’s speech as in any sense implying that the starting point of the first discourse was arbitrarily picked and caused troubles later. To the contrary, the difficulties associated with saying ‘the natural beginning’ in the dialogue are dictated by the limited ability of Timaeus’s discourse to sever two types of causes from one another in the points of overlap of natural processes shared between Intelligence and its counterpart in the world of change, each of which could be detached into a discourse of its own and with respect to which Timaeus’s discourse as a whole takes a middle ground. I will argue that the suspension of the twofold differentiation of the modes of being in the discussion of the Third kind does not entail a substitution of the Demiurge for another actor in the genesis of cosmos. Plato himself makes it clear when he swiftly brings back again the figure of the Demiurge at the closing of the discussion of the receptacle of becoming, but in my analysis I will focus on what is at stake in the expiration of the applicability of the twofold in Timaeus’s discourse and ‘keeping with the present kind of exposition’ at once in the discussion of what comes about of Necessity that he says will be “no less likely... more likely, in fact, than what I have said before” (48D4-5).

In the previous chapter, I discussed Plato’s introduction of the Third kind in the second story. But just what is this Third kind? Plato uses a number of terms in association with it — ‘Receptacle, ‘chôra,’ ‘Necessity,’ ‘the nursemaid’ — but
without some explanation, these provide little help in understanding what Plato has in mind. For example, is the Third kind postulated simply as a *substrate* so that the Demiurge has something to work upon in creating images modeled upon the Forms, or does it contribute something of its own to the cosmological story? And, in light of the introduction of the Third kind, how should we interpret the “creation” story itself? Was there a time *before* the Demiurge brought things into cosmological order? Should the Demiurge be viewed as acting in a fashion like the God of the deists, who performed an initial act of creating an orderly world and then left it to operate on its own principles, or should the “creation” story be taken as a literary or mythic way of presenting the idea that the order of the cosmos is dependent upon the activity of a divine intellect? How should we interpret the claims that the Third Kind contributes its own principle of Necessity, and that Necessity is “persuaded” by Intelligence? Is the existence of the elements, or the “traces” of the elements, something that is a product of the work of the Demiurge, or something already inherent in the Third kind? And what are we to make of the peculiar-sounding idea of the “shaking” of the chōra? I therefore begin this chapter with a short module on literalist and non-literalist interpretations of the myth of the creation to disentangle “chaos” from the “pre-cosmos.” In the course of this, I deepen our understanding of the Demiurge as the efficient cause of Becoming and the product of the demiurgic activity as a work of art. I argue that the materials used by the Craftsman are the same as they were in the pre-cosmos, except distinctive “shape and number” that they acquired at his hands. Finally, I analyze the anatomy of mortal creatures in terms of the organic nature of their bodies and show that motion by Necessity propagated by “shaking” of the Receptacle serves as a necessary condition of life in the cosmos.
§21. Pre-Cosmos.

Chance contained order, and when order came it allowed a place in creation for chance.

— A. Verdet (In Baudrillard 2008: 182)

First things first: “Timaeus’s task in Plato’s dialogue is to show how it came to pass that an eternal realm could initially give rise to the world we see around us, the world of experience, the realm of Becoming” (Bianchi 2006: 126). Now a cosmologist, on Plato’s account, cannot question the existence of the Demiurge: the father and maker of this All. The world is a product of perfection he sought in all things. Throughout the history of Timaeus’s scholarship, some commentators of this ancient text tried magnify the genealogical relationship between ὦρανός and δὴμιουργός, whereas others saw it as deeply problematic from the standpoint of rationality. The controversy surrounding the text’s mentioning of Demiurge has divided scholars into those who take Plato’s text as supporting a view that behind the creation of the world there was time ‘before’ the world came to be and others who believe that the “cosmos in the form it is in today is everlasting in both temporal directions” (Broadie 2012: 243), which came to be known as literalist and non-literalist interpretations, respectively.

The literalist interpretation is based upon the view that because the image of time was not part of the physical world until after an artisan god ordered matter we may speak of a certain period of time in the past during which there was an anticipation of the creation of the universe, i.e., before the universe came to be. This “before” here marks a countdown to the moment beginning with which the universe will have been coming to be in its current state. In contrast, one of the main tenets of the non-literalist interpretation has been that Plato did not seriously intend to say that the world has, strictly speaking, a temporal beginning. It takes
the assumption that the world did not always exist as merely another way saying
that it came into being, which does not entail a separate claim. For postulating the
temporal beginning threatens to flood the model of the Intelligent Craftsmanship
with more than one charge of arbitrariness.

One of the cornerstones of the literalist reading is the belief that it is not
until after the Demiurge ordered matter that the world started existing as such. It
breaks the duration of the Intelligent Craftsmanship into two separate intervals:
the present, which dates from the construction of the sanctuary of gods, and the
past, which it interprets much more broadly. It projects in the past the interval of
time over which the Demiurge worked on making the cosmos and, hence, the pre-
historic chaos that preceded the cosmos before it was complete. Chaos designates
the disordered state of the materials of the universe in which they rested however
long before the Demiurge set them revolving in the orbits of the World Soul.
Thus, the literalist reading assumes that, as a temporal process, the demiurgic
activity is older than the world.

The main non-literalist argument against the view that the duration of
existence of the world is less than the age of its Craftsman comes from the text
itself. For Timaeus explicitly links the past and future to the measurability of time
when he says at 38A7-8 that they are “kinds of time… which circles in accordance
to a number.” That is to say, time is generated together with the visible system of
circulating celestial bodies. According to Carone, “this suggests that simple
duration is insufficient for time, which instead requires orderly sequence” (Carone
2005: 34). Therefore, it makes no sense to ask whether or not chaos was as much a
product of the Demiurge’s passivity as cosmos of his activity, since we cannot
rationally distinguish the interval in the duration of which the Craftsman was busy
making the image of time from the duration of existence of pre-cosmos. Hence, the genesis of cosmos must be of an infinite duration, though it doesn't preclude the genesis of cosmos from having a beginning, nonetheless, as I will show below.

We can think of still another argument against the notion that Timaean cosmology says that there was an indefinitely long period of time before the Demiurge initiated the genesis of cosmos. Considering that one of the defining attributes of the Demiurge is to make everything as good as possible, staying inactive while the chaos reigns for no apparent reason, it seems to me, would be completely incompatible with the nature of the Demiurge as an all-good being.48

All of these arguments, however, are directed against a sort of “a genealogical tree” view of the cosmological time, in which the creation of the world is above all a metaphor for the expiration of the pre-cosmic conditions of the disorder. To be sure, the literalist interpretation takes a time-like transition corresponding to the qualitative change from the pre-cosmic disorder to a state of order to be an actual aspect of the genesis of cosmos over and above its being described by Plato in the text as ‘having-come-to-be’ in the present state. But the main problem with the literalist interpretation does not come directly from the assumption that the Demiurge actually started to make the cosmos when there wasn’t one. Rather it arises from the assumption of a proto-historical moment when that making was rendered complete after a supposedly finite number of manipulations on his part, which plants into Timaeus’s discourse a break in time between the beginning of the creation of cosmos proper and setting of the stars in

48 Note that it “is a strictly theological rather than cosmological objection to the idea of a cosmic beginning. How far it is relevant to the Timaeus account may depend on whether we read this primarily as cosmology or as the lead-in to a theology…” (Broadie 2012: 244).
the orbits of the World Soul. As Broadie notes, the difficulty associated with the literalist interpretation vanishes, once we hold that the cosmos is still undergoing physical development, because in that case we could date back “the beginning as many years ago as it was necessary for the cosmos to have reached the present stage” (Broadie 2012: 244), and

The dispute between the literalist and non-literalist interpretations, then, is rooted in Plato’s claiming as a part of his argument that the world that was created by the Demiurge continues coming into being as is. This is the natural sense of Plato’s words at 27D6-28C3 where he states in firm manner that the world qua a sense-object did have a beginning. In the eyes of Cornford, “this question is… bound up with the question of whether the Demiurge, as such, is mythical. If he was not really a ‘maker,’ then there was no moment of creation” (Cornford 1997: 27). For Cornford, as for many others, the creation is an ongoing process perpetually sustained in motion by a ‘cause.’ Cornford defends a view that the “myth is to be taken, not literally, but as a poetical figure” (Ibid). He also argues that the mythical form of the story of a creation in time49 is used to show that the function of Demiurge was to have “contributed an element of order to Becoming, because an ordered world will be more ‘like himself,’ that is to say, better, than a disorderly one” (Ibid).

Thus, in Cornford’s assessment, “the whole purpose of the Timaeus is to teach men to regard the universe as revealing the operation of such a Reason, not as the fortuitous outcome of blind and aimless bodily motions” (Cornford 1997:

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49 In his 2003 book, Cornford suggests that the Demiurge is merely the World Soul presented in a certain way. A number of different authors similarly thought that the separation of the Demiurge from the world is redundant (Archer-Hind, 1889, 38-39; Carone, 2005, 49).
He continues, “If this Reason is not a creator god, standing apart from his model and materials, where is it to be found?” (Ibid). But according to Broadie, “this is an inference of interpreters who…begin by assuming that the rational view for Plato to have held would be one on which the divine world-making principle would not be separate” (Broadie 2012: 7), a priori. The paradox formulated by Cornford is a false dilemma. We need not imagine the Demiurge as an anthropomorphic God who “once upon a time” created the world, as it were, in order to reconcile the emphasis of the Timeaen cosmology on teleology and proto-historical structure of the myth. This will relieve us greatly of the discomfort the non-literalists feel with presence of the Demiurge in the Timaean cosmology which pressures them into explaining away the proto-historicism for the unwanted ambiguities it disseminates, in the following way.

I agree with Sarah Broadie who claims that “taking proto-historicism to be saying something important about the cosmos is not the same as taking it ‘literally’ if ‘taking it literally’ means seeing it as first and foremost a flat denial of the proposition that the cosmos always existed” (Broadie 2012: 274-275). She admits that Timaeus did not really mean to say that the cosmopoiesis goes through successive stages as his story suggests. She considers the image that an intervening separate Demiurge has in the Timaeus to be a presentational device that is designed to establish “the incorporeity of the world-making intelligence” (Broadie 2012: 275). The image, she says, makes it explicit that it is beyond the capacity of brute matter to turn into or generate cosmos by itself. But she also

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50 Taylor’s view: “The physical world, then, has a maker. . . . This means, exactly as the dogma of creation does in Christian theology, that the physical world does not exist in its own right, but depends on a really self-existing being… for its existence” (In Cornford 1997: 27).
insists that there is a sense in which in order to fit “the fact that the complete cosmos involves generation of mortal animals, Plato had to assume a first or prototype, the immediate work of the divine demiurge” (Ibid.). As she explains, “the subsequent generations then come to be in the ordinary genealogical course of things. But a first generation inevitably seems to imply a finite time between now and when the cosmos was first complete” (Ibid.). So, she says:

By deistically putting the transcendent origination at the beginning of things, so that ever since it is only in the background, Plato distances himself very clearly from the Empedoclean or Diogenean kind of system, where the corporeal matter of the contemporary cosmos (or some force invested in matter) is the divine crafting Intelligence (Ibid.).

On the surface, Plato’s talk of the “Creator” looks like an attempt to beat the materialist theories describing the universe in terms of its spontaneous generation from the mechanical contact of ‘bits of stuff,’ the movement of which is directed by aimless forces. But upon a closer inspection, it becomes evident that Plato wants to argue that demiurgic activity foments the Becoming as such, from creating the space for the regular movement of bodies to piecing together the flesh and sinews of the animals. In fact, for Plato and surely for many in his audience the idea that some sort of intelligence gets expressed in regular and ordered motions of the visible bodies, and beautiful or in any other way beneficial corporeal structurings “would have come as completely natural” (Broadie 2012: 179). Thus, the Craftsmanship of the Intellect manifests itself as an efficient cause sustaining the order in the universe through and through, the order being a name of what came about as a result of a realization of a copy of the eternal model (in Cicero’s translation: “simulacrum aeternum esse alicuius aeterni,” 29A9). Accordingly, Carone thinks that “the precosmic chaos may well have counterfactual value: it helps us to see how the universe would be if the
aimlessness prevailed” (Carone 2005: 34). Whether or not chaos is an accurate
description of pre-cosmos, it is crucial that we recognize that Plato need not have
attributed to the genesis of cosmos a beginning marked by a point in time to make
his cosmological argument work the way it does.

§22. Artisanal metaphor.

Up to now, I have been defending the teleological emphasis of Timaean
cosmology against the view that in the Timaeus Plato attempts to account for the
“elements of rational order in the visible universe” (Cornford 1997: 27) by
imposing the Demiurge and making him the cause of the genesis of cosmos
instead of the physical processes which occurred in reality. This interpretation does
not agree with what Plato himself says in the text. I have argued that whatever
were Plato’s reasons for adopting it, the metaphysical distinction of the two kinds
landed him in the conclusion that there must be a beginning of the world qua a
sense-object even before he asserted what kind of ‘maker’ was its cause. It is the
name that this maker subsequently receives, the Demiurge, along with the
attributes of the agency it personifies that Plato determines without a proper
argument.

Though it is not completely so because, as Gadamer points out, “the
possibility of knowing something about the world as an ordered whole rests on
precisely this two-tiered structure of Becoming, i.e., on the constant noetic order
behind the surface… on the copy structure of things” (Gadamer 1980: 161). That
is to say, because the Demiurge is separate from it, cosmos is intelligible only to
an extent that it was “wrought in the similitude of that whereunto it was being
likened” (39E2-3). For the world becomes something in so far as that into which it
turns is determined by what is envisioned for it beforehand. By nature “the
envisioning [i.e., the “what” of what is being made] of the maker is ambivalent. But when that which has become [i.e., the universe] is “beautiful,” the envisioning must have been [also] aimed at the beautiful, and as an obvious consequence, “beautiful” always implies constancy” (Ibid.) and constancy of the model after which the product is shaped implies the Craftsman. This is what it means to start at the natural beginning on the subject of cosmos and its model. It is crucial to take from this discussion that the differentiation of the modes of being does not by itself entail the paradigm-product structure. It is only after things are viewed in terms of “making” and the envisioning guiding it, “does the concept of the paradigm enter in” (Gadamer 1980: 163). Accordingly, Gamader remarks, the act of making something and having come to be can be guided just as well by a changing model that is formless and lacking constancy as by a good projection towards the Beautiful.

One must keep the function of the Demiurge in the argument completely separate from the question of how far Plato’s theology succeeds in providing an explication of popular belief on the one hand while, on the other, conforming to the demands of rigorous thinking. Precisely this making of the world, the “creation” of the world, is far removed from popular belief and from the mystery religions (Gadamer 1980: 180).

Thus, in spite of the form of the myth it employs as a presentational device, there is no attempt to explain physical processes with preternatural forces in Timaean cosmology. But it also refuses to aspire to be a description of the first principles of everything quite pronouncedly at 48C3-4. Nevertheless, it promises — and, I think, in good faith — that it will remain strictly within the

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51 Moreover, as Plato indicates, when persuading the Necessity, the Demiurge ordered matter according to the ‘intrinsic’ natures of fire, water, air, and earth as they were even before the heavens came to be. It took the form of construction of the geometric shapes of the four kids of element.
confines of the paradigm it studies, which is the Form Eternal Living Creature with intelligence and soul, which means that that this world is taken to be fully autonomous as a made being. As Plato says, it supplies “its own waste for its food… For the builder thought that if it were self-sufficient, it would be a better thing than if it required other things” (33D1-2). This world, as a self-providing and self-determining deathless animal, need not be a contingent mutation of the materials determining its constitution in a sense that the materials would be trapped in disorder, had the Demiurge not intervened.

The unconditional goodness of the Demiurge compels him to start making the world in a fashion which is similar to a joining of male and female chromosome at the moment of conception, where XY chromosome represents Intelligence and XX chromosome Necessity. Ultimately, the world and everything in it is the outcome of the gradual vanishing of everything because of which Intelligence and Necessity could possibly keep away from one another one and, in turn, coming together, or crystallization, thereof at the site (i.e., chōra, the Receptacle) of that thing we call earth and our home, which in reality extends to the whole universe.52

I think that it is a strong evidence in favour of the view that that the creation is sempiternal so long as the shaping of the materials is contemporaneous and coextensive with their existence, as it were, so that the Demiurge always already attends to his assignment so much that Carone claims “there is no god over and above the universe itself” (Carone 2005: 4). For that reason, the

52 Describing the chōra as “the dark nocturnal space-matter of the universe” and as “chaos,” Fink stresses its maternal nature: it is “the great mother, the “earth” (Eugen Fink, Zur Ontologischen Frühgeschichte von Raum-Zeit-Bewegung [The Hague: Martinus Nijhoff, 1957], 187f.).
description of the Craftsmanship of the Intellect cannot be divorced from reality, if we understand by it the material plane of the universe. It makes no sense to ask if we could track and list all the mechanical changes of the sensible materials — or the laws, governing them, including statistical probability — that come in shaping the cosmos as we know it. An imprecision in physics does not touch Timaean cosmology, considering that it is built on premisses sharply differing from modern astrophysics. The description of the Craftsmanship of the Intellect is, therefore, irrefutable by the epistemic standards of a likely story because it concerns what immediately pertains to the cosmos as a thing that has a beginning (though, as I would argue, not a temporal one). On this note, I would like to part from the discussion of literalist and non-literalist interpretations because here I cannot speak about it anymore.\footnote{\textit{In any case, the artisanal metaphor, suggesting a definite product and different steps of the work starting and developing in time, has proven to be a most useful way for Plato to highlight the teleological arrangement of the twofold, like any good product of art, which is made not at random, but with a definite purpose" (Carone).}} Essentially, I am of the same opinion as Johansen 2000: “a temporal creation story is not a one-off even but possibly a recurrent even” (91)

\section*{§23. Whole and parts of cosmos.}

At the end of §20, I have raised the question whether the starting point of the first discourse is arbitrary. It has become clear by now that a suspension of the twofold of a paradigm and a product made to look like the paradigm does not and cannot entail substitution of the Demiurge for another actor in the genesis of cosmos. Concerning the image and the paradigm after which it is modelled, to start at ‘the natural beginning’ it is indeed necessary that there be an intervening δημιουργός. At the same time, δημιουργός is not All, for it is separate, in the
strictest sense of the word. Moreover, I have established that this δημιουργός has nothing in common with the anthropomorphic god who “once upon a time” created the world. Rather, it is present to the effect that the physical world as a whole is other than the sum of its parts (Gestalt). This, as we know, is one of the main attributes of the work of art, which the product of the demiurgic activity in Plato’s opinion perfectly exemplifies.

For convenience, I will speak of art only in pictorial terms. In the work of art, we distinguish the materials used from how they were arranged by the Craftsman so that the image as a whole affects us differently from how these things on their own normally would. In the work of art, there comes to be something which as a whole is cardinally irreducible to its parts. The parts are missing what the whole possesses, and the whole is made out of something that the parts do not have.

Similarly, in the case of the genesis of cosmos, there came to be something which had parted ways with “the indeterminacy of Becoming in the sense of constantly becoming other than it was” (Gadamer 1980: 161). Then, “in speaking of such a becoming, one necessarily looks to that which has become” (Ibid.). But since “Becoming must derive from something which causes it… what we perceive is not mere gignomenon, i.e., “always other” than it is, but instead the copy of something fixed and determinate” (i.m.) (Gadamer 1980: 162), considering that it was generated by the best of all causes. What we perceive is precisely the image of the paradigms in so far as the copy is different from the divine originals after which it is modelled. Here, “the paradeigmatic aspect of the ideas… comes into marked prominence: they are the eternal and immaterial types on which all that is material is modelled” (Archer-Hind 1888: 31). The universe and “things whose
nature it is to share its kind” (31A2) are “invariably borne along (aei phéretai) as a semblance of something else” (52C3).

Now a cosmologist, on Plato’s account, is somebody who is able to give to the observed natural processes the most rational explanation that he or she has at hand. But the cosmologist will not be tempted to say that the phenomena are caused by the peace of the material being violated by disturbances. Considering that the heaven has been tuned to such a degree of precision that it literally works like a clock, in Plato’s opinion, this picture is improbable. As Cornford argues, that “the visible world is an image of the eternal” (Cornford 1997: 22) is the most cardinal doctrine of Platonism. Plato strongly believes that the materials are being moved by the Intelligence, rather than of blind necessity. It implies that the Intelligence surmounts all changes in the physical world such as, for instance, change of night and day that serves, wisely, as a natural measure of time.

That is to say, the conditions of change support the functions for which the materials of life (body, organs, flesh, tissues, bones, etc.) are selected and fused together in the course of things. So, in the Phaedo, Plato says that as ‘the body of the man flows and perishes while he is still living, the soul constantly weaves anew that which is worn’ (Phd. 87D9-E1). In fact, Intelligence would have its plans impaired if a sufficient amount of transformation failed to be take place on the account of motions. For example, in the Symposium, we read that that all mortal beings “are preserved” as they are when something new replaces what “goes away and grows old” (Symp. 208A7-B2). And in general, the presumption is that “the organism remains healthy when it maintains the proper proportion of its constituent elements while undergoing their loss and replenishment” (Miller 2003: 50). The cosmologist will therefore try to explain phenomena in a way that
reflects the best end that the Demiurge has envisioned for this All in the world of change.

But it is also a mistake for the cosmodogist to dismiss the material conditions of the phenomena he studies as in no way genuine causes. These do not stand to cosmic objectives in the way in which the anatomical condition of Socrates stands to his ethical purposes. They are causes, albeit only auxiliary ones, since cosmology cannot understand the phenomena properly without expertise in the physics and chemistry of inanimate matter. Furthermore: in trying to understand and indeed to identify a human action as such we can well afford to ignore its anatomical sine quibus non, because we typically have route that goes through the logoi of the agent… But since the Timaean natural scientist cannot question the Demiurge, there may be cases in which we can only proceed to infer the specific purpose of some phenomenon considering its material details. In this way by considering the fragility of the human cranium Timaeus draws conclusion that its thin-ness of bone is conducive to Intelligence (74E1–75C7) (Broadie 2012: 176).

Moreover, the discrepancy between the whole and the parts of the physical world serves to highlight what in the genesis of cosmos escapes from the eye of cosmologist so long as the universe is viewed in terms of the image and the paradigm. It consists in the fact that the materials that are so and so put together in the work of art, as a rule, are not exclusive to the image (and it goes without saying that what it is an image of may not have anything in common with the “copy” so produced, other than what is internal to the image as a completed work of art). To the contrary, we often find that the materials of objects which we treasure as the works of art are parts of the most mundane things surrounding us in everyday life. For that reason, the job of the artist, or a craftsman as excellent as the Demiurge, consists in spotting the underlying unity of what are usually discrete parts of the image and applying his knowledge to turn the available material as much as its nature allows into something that has acquired a new meaning as a representation of something other than itself. However, in spite of the maximum goodness that the Demiurge sought in all things, he cannot go about
in his work employing any materials he finds to achieve the desideratum. This is both a normative and positive claim that I will expound next.

On the positive side, it is apparent that because a sensible material from which a copy is made in the cosmos can be the same in the images that are modelled after many different things at once, it is not its “natural” function to emulate the Forms. This seems to me suggest that when the Intelligence harnessed them for its own purpose, “it could not just let them go as they would have been going on without it” (Broadie 2012: 183). That is to say, before they submitted to the will of the Demiurge, materials were “in the condition one would expect thoroughly god-forsaken things to be in,” as Plato describes the “traces” of matter in the Receptacle at 53B3-4, of which later. What this means is that the materials that were provided by “nature” lacked inner virtus (‘goodness,’ ‘worth’), which a good artist would know how to extract from them, because if he or she failed to relieve the materials from the properties which were incompatible with one another at the very start they would become a hindrance for the progress of work later. Thus, before he could start making the cosmos, the Demiurge first and foremost had to render the “raw” materials ready-to-hand. For Plato, it took the form of the imposition by the Demiurge on the “traces” populating the pre-cosmos of distinctive “shape and number” recognizable in the current shapes of the materials. I will return to this later.

On the normative side, it is an empirical fact that there abound materials which by nature are conducive to the purposes of Intelligence and function as they are intended to by the Demiurge in some places (for example, the heavenly bodies set the measurability of time). However, there are others still, perhaps more rare though, which turn up as disastrous forces at the sites of tsunamis and hurricanes,
or anomalies, which are not assigned by the Intelligence a particular function. In accordance with this logic, we can likewise imagine two sets of materials, each of which is perfectly good on their own right, upon coming into physical contact, producing the effects contrary to Reason, as is the case with looking at the Sun with the naked eye, for example.

§24. Character of the material.

Thus, indifference to the purposes of Intelligence which induced in it irregular motion and chaotic cycle of generation and perishing in the pre-cosmos did not disappear from the material even after it was summoned by the Craftsman who transformed it to support and foster life in the universe.\textsuperscript{54} The mythological god does not participate in inventing the new materials, but rather puts them together in order according to proportion. However, in contrast to what functions with which the material has been imbued by Intelligence in total contribute to maintaining the universe in order, this indifference is immanent and timeless condition of the material, from which the forces of nature and physical laws derive. The unswerving indifference of the materials to what impact consequences of their physical contact here or there would have on the world does not imply that Necessity secretly plots against the Intelligence to undermine the jurisdiction of

\textsuperscript{54} Cornford, 1997, 175: “there is, indeed, one feature of the properties, once they exist, which makes them not wholly amenable. Physical qualities occur in groups of concomitants. The \textit{Timaeus} contains an illustration of the disadvantage that may result. The function of bone is to protect from injury the seat of life, the brain and marrow. To that end bone must be hard. But its very hardness makes it too brittle and inflexible, and also liable to decay under excessive heat. Accordingly the skeleton needs to be wrapped about with soft and yielding flesh. The brittleness is a concomitant of the hardness, and it can be described both as necessary or inevitable and as ‘accidental.’ The ideas of necessity and chance are once more associated in the notion of ‘the necessary accident.’ In this instance brittleness happens to be an inevitable but undesirable concomitant of the useful quality, hardness.”
the soul, but rather suggests a reversibility of most, if not all, of the natural phenomena.

Reversibility explains why, in effect, there is growth and decay, generation and perishing of things in nature. Soul has its private desire to keep things as much as possible in the order which benefits Reason with which it is endowed, but the materials will not harken to its wishes alone. Their indifference to the Intelligence will make what is hypothetically good for something go through a test of what is on every counting a Necessity. For better of worse, Necessity makes all life come to an end at some point. But the same principle applies to this All: there is only so much you can change something before it ultimately falls back where it was again, which can cause fear, frustration and other negative emotion or even harm intelligent agents. As a consequence, although soul and body are held together by bonds dissoluble by no one except the Demiurge, external factors can possibly detain or even incapacitate the intelligence from performance of its functions in life and subsequently make revolutions of its circles deviate from their natural course and cause disorder in the soul.

Plato is explicit about this when he discusses how the subservient gods provide for the human soul bodies compounded of earth, air, fire and water and describes the reinforcing benefits of culture and nurture on the behaviour of

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55 So it is seriously misleading when writers make the following sorts of statements: ‘The good intentions of the Demiurge are often frustrated by the recalcitrant matter with which he must work, but which he had no part in creating’ (Hasker, 1998) and ‘Matter is not only inert, but chaotic, not only threatening, but actually working disintegration. Order comes from on high, from a sort of celestial monarch — or rather from his vice-regents — who impose it ever some imperfectly on a universe which tends towards chaos and destruction’ (Mansueto 2012: 36). It is primarily against these views that I will claim Plato argues that there is no independent force in nature.

56 It is the gift of the Demiurge to the subservient gods whom he freed them from death. Otherwise, they would be subsumed in the cyclical generation and perishing like mortal animals that were fashioned by them.
human beings at 42E6-C4.\textsuperscript{57} The courses of the soul, when encased in corporeal materials, are so disturbed by the ebbing and flowing stream of nutriment and by

\textsuperscript{57} The passage is rather crucial to our discussion. I provide it in full and highlight some points that are addressed directly in my analysis in italics: “Then the creator had made all these ordinances he remained if his own accustomed nature, and his children heard and were obedient to their father’s word, and receiving from him the immortal principle of a mortal creature, in imitation of their own creator they borrowed portions of fire, and earth, and water, and air from the world, which were hereafter to be restored—these they took and welded them together, not with the indissoluble chains by which they were themselves bound, but with little pegs too small to be visible, making up out of all the four elements each separate body, and fastening the courses of the immortal soul in a body which was in a state of perpetual influx and efflux. Now these courses, detained as in a vast river, neither overcame nor were overcome; but were hurrying and hurried to and fro, so that the whole animal was moved and progressed, irregularly however and irrationally and anyhow, in all the six directions of motion, wandering backwards and forwards, and right and left, and up and down, and in all the six directions. For great as was the advancing and retiring flood which provided nourishment, the affections produced by external contact caused still greater tumult—when the body of any one met and came into collision with some external fire, or with the solid earth or the gliding waters, or was caught in the tempest borne on the air, and the motions produced by any of these impulses were carried through the body to the soul. All such motions have consequently received the general name of ‘sensations,’ which they still retain. And they did in fact at that time create a very great and mighty movement; uniting with the ever-flowing stream in stirring up and violently shaking the courses of the soul, they completely stopped the revolution of the same by their opposing current, and hindered it from predominating and advancing and they so disturbed the nature of the other or diverse, that the three double intervals [i.e. between 1, 2, 4, 8], and the three triple intervals [i.e. between 1, 3, 9, 27], together with the mean terms and connecting links which are expressed by the ratios of 3 : 2, and 4 : 3, and of 9 : 8, — these, although they cannot be wholly undone except by him who united them, were twisted by them in all sorts of ways, and the circles were broken and disordered in every possible manner, so that when they moved they were tumbling to pieces, and moved irrationally, at one time in a reverse direction, and then again obliquely, and then upside down, as you might imagine a person who is upside down and has his head leaning upon the ground and his feet up against something in the air; and when he is in such a position, both he and the spectator fancy that the right of either is his left, and the left right. If, when powerfully experiencing these and similar effects, the revolutions of the soul come in contact with some external thing, either of the class of the same or of the other, they speak of the same or of the other in a manner the very opposite of the truth; and they become false and foolish, and there is no course or revolution in them which has a guiding or directing power; and if again any sensations enter in violently from without and drag after them the whole vessel of the soul, then the courses of the soul, though they seem to conquer, are really conquered. And by reason of all these affections, \textit{the soul, when encased in a mortal body, now, as in the beginning, is at first without intelligence}; but when the flood of growth and nutriment abates, and the courses of the soul, calming down, go their own way and become steadier as time goes on, then \textit{the several circles return to their natural form, and their revolutions are corrected, and they call the same and the other by their right names, and make the possessor of them to become a rational being}. And if these combine in him with any true \textit{nurture or education}, he attains the fulness and health of the perfect man, and escapes the worst disease of all; but if he neglects education he
external sensations that the revolution of the Same is stopped (and the mean terms which unite the sphere of the Other are disordered; thus, at first the soul does not attain to truth and wisdom). Plato depicts this stream as a great and billowing river of the materials, encircling the soul’s vessel like a serpent, which flows through the body and rocks the circuits of the soul. These circuits did not “cause and suffer” violent motions but were rather “violently borne along and bore along” (43A7) \( (\text{biāi ephéronto kai ēpheron}) \) that “great river” which constitutes the body.\(^{58}\) And at \textit{Epin.}\ 983B God does not first put life into a body and then “make it move as he has thought best” but rather “sustain(s) it in motion (\textit{phérein}) as he has thought best.”

Therefore, it is because the body is at all times subject to ‘passage’ (\textit{phorá}) that it is “describable as being in the present state of ‘having-come-to-be.’” So Robinson: “Each and every sense-object… is in a present state of subjection to \textit{phorá} having been at a time in the past subject to such \textit{phorá}” (Robinson 2004: 83). The natural sense of \textit{phérein}, here as elsewhere, is to “support” (of a pedestal bearing a statue) or “carry” (of a ship carrying passengers). So, Timaeus says, “if, then, one is really going to tell how the world has come into existence on the above principle, one must also bring in the character of the Wandering Cause — how it is its nature to \textit{phérein},” (48A6-7). Here, I take the meaning of \textit{phérein} to be “to set things in process” either/or “to sustain them in motion.”

\textit{§25. Necessity again.}

\(^{58}\) This is primarily because “the body is heated and cooled inside by things that enter it and is dried and moistened by things outside of it and made to undergo the consequent changes by both of these motions” (88D1-4).
Now let me say some words on why it is the case that the coming to be of this cosmos from the start was, in words of Broadie, “a compound operation involving Necessity and Intelligence in combination” (Broadie 2012: 181). First of all, the universe was made perfect by the Demiurge because he looked to it that it be a faithful representation of the intelligible world, but the inner circuits of the body in which it keeps things moving on behalf of the intelligent life extends only so far as the rational order is concerned. As a matter of fact, this order is all-pervasive and sweeps across the universe precisely because the physical world as a whole came to be divided into soul and body, and the soul looks after the body so that the movement does not upset the unity of its parts. The rational order, however, is restricted to the whole, which, having firmly come to be, does not depend on any one thing that was generated but rather exists over and above the death awaiting some of its parts such as mortal creatures.

One of the conditions that befell the life of creatures that were made by the subservient gods, among who were the humans and the animals, was the organic nature of their bodies. The existence of the organic nature in the physical world is part and parcel of the rational order into which human souls were born here on Earth. Plato does not discuss plant life and or organisms whose contributions to Reason are far from being obvious (e.g., parasitic organisms) in the Timaeus. Nevertheless, his insistence on the fact that the Demiurge directed the subservient gods to take over the genesis of cosmos after him suggests that he believes that “the beautiful organic formations” did not emerge spontaneously, but rather are also a product of Intelligence. Plato addresses that issue when he names the Intelligent Cause of vision: ‘to observe the orbits of intelligence in heavens and apply them to the revolutions of our own understanding.’ I have mentioned it here
to ram home the argument that the indifference of the materials to the objectives of Intelligence implies that they are unintelligent, given that the nature of the greatest benefit that is provided by vision is “such as to make it utterly implausible that they would aim for that” (Broadie 2012: 179). It has been rather crucial to establish that the materials are non-intelligent, because it follows that they are in every respect no more than auxiliary causes, the Intelligent Cause being primary. “All that comes in to give sustenance to the body,” in the phrase of the Phaedo (75e), including, but not limited to the flow of nutriments, precipitates reactions, a fraction of which allows organisms such as us to grow and reproduces. However, the scope of the application of the materials is obviously not limited only to support of the intelligent life. To the contrary, bronze, for instance, that Greeks used to make weapons because of its hardness made a strike with a sharp blade deadly to the enemy. Accordingly, there are so many ways in which it is possible for things such as air and water that are the necessary ingredients of life on earth to bind together that one could literally die if too much water came in or too much air came out. (I am intentionally oversimplifying this to make a point.) This observation serves to reflect the fact that the organic itself would not count not as a class of the materials, on Plato’s reading, but rather as a process, in the strictest sense of the word. As a process, it is not sui generis, but as generated and perishable it is one with things whose nature is not organic. For at bottom all the materials are inanimate and, hence, soulless things ‘moved by something else and movers of others by necessity’ (46D4-C2).

59 Broadie, 2012, 182: “The elements themselves lack intelligence which, if present, would reliably aim to produce the beautiful organic formations of the cosmos.”
Like every process, the organic is reversible. For that reason, divine or noetic causes go hand in hand with residual tendencies of the materials for return to the inorganic state in which they would not be agitated by the motions originating in the soul and move purely as Necessity directs them. These tendencies are discharged through motions in six directions (43B2-6) when the materials impact one another and set other things adrift. Necessity and Intelligence are so intimately connected that the physical contact of the different organic and inorganic compounds can break the order, at least on earth, and even deflect some things from reaching their telos as a result of that. In fact, Plato thinks that if there is such a thing as the unbreakable “laws of nature” which the Demiurge cannot change then it would be none other than the law of motion because for cosmos to be possible, not just any motion will do. There must be something which makes the separative movements of the elements to take place.  

The underlying assumption here is that without it the materials, being inanimate, after some reactions are repeated a number of times, could, in principle, be fused into one immobile mass (cf. 57E2-58A1), out which nothing would ever be able to come to be. In other words, there must be something which would keep the process of a kind of “sorting” of the materials going and so

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60 Plato uses the metaphor of “shaking” of the Receptacle in the Nurse Analogy at 52D4-53A5: “And the nurse of coming-to-be appears to bevel to be very diverse, being moistened and inflamed and receiving the forms, and undergoing whatever other qualities accompany the <elements>; and that because it is filled with forces that are neither similar nor equally balanced, it is not equally balanced over any <part of> itself, but being everywhere unevenly swayed it is shaken by the <elements [i.e., their “forces”]>, and in turn being moved, it shakes them <And that> the moved <elements> are separated out and always carried some one way, some another, just as when where is winnowed by fans and <other> instruments, being shaken and sifting, the dense and heavy <particles are carried> in one direction, the fine and light ones are carried to a different place and settle down. <And that> thus, at that time the four kinds <of elements>, beings shaken by that which receives [i.e., the Receptacle], it being moved like an instrument that produces a shaking, are separated from each other, the most dissimilar farthest off, but the most similar are pushed together most into the same <place>.”
“sustain” them in motion forever so as to allow for gathering of the beautiful organic formations. By gathering I mean not just the reproduction of species in which these traits inhere genetically, but also a fulfilment of the requirement necessary for “the sustenance of body” such as “the large tracts of the elements which constitute distinctive environments for different types of mortal animals” (Broadie 2012: 228) as well as the process of the natural growth (phusis) of the nutriments, on which their physical survival depends. In that sense, motion and change it brings with it (dynamis) is “a necessary condition” of life; “that without which” organisms could “not” come to be, now as ever. In what follows, I explain why the Timaean cosmology really cannot do without the separative movements and provide an account of their origins in the “shaking” of the receptacle and wet-nurse of all becoming.

§26. Motion.

Plato has a very unorthodox and controversial explanation of the number of possible motions in space. As D. Miller observes, Plato stringently rejects the notion that the place of the body in the world is established on an absolute locational grid. The explanation of the law of motion, for Plato, consists in the fact that the different sets of materials irrevocably tend to occupy separate regions of space, which can be best observed in the case of the elements. He believes that the positions within the framework of the whole world that these bodies occupy can only be established relative to other elemental bodies. For example, Plato thinks that the particle of fire is ‘light’ and it goes ‘up’ because it seeks to ‘fly’

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61 See the discussion of “the necessary conditions” in Phd. 99ff.
62 Keep in mind that Plato conceives of elemental particles as simples bodies. That is to say, elemental bodies are not composed of other identifiable bodies.
away from earth to its proper region of space. So, “Down is the place (topos) to which such a <body> moves” and “upward” is motion away from that place (63E5-7). So, Miller: “Up and down are not determined by reference to a center point. Rather, up and down are relative to where an elemental body is found with respect to its place” (Ibid) that one might call its “home region” (see Zeyl, 2000: lxxvi). The same kind of explanation holds true of all motions, with a probable exception of rotation.63

In general, he asserts that the migration of the materials in the physical world is governed by the principle of like-to-like, a tendency of their constituent elements to seek out their home regions: “dense and heavy parts go one way, and the rare and light are carried off to a different place and settle there” (53A1-2) (Archer-Hind trans). Even more so, he claims: “[F]or this reason each <element> holds a different region (χωραν) [i.e., from others] even before the whole came to be, it having been arranged out of them” (53A6-7) (Miller trans). Thus, Plato’s emphasis on the subservience of materials to the world-making Intelligence in no way allows us to picture them “as just waiting about to be picked up and used” (Broadie 2012:182). Far from it: the pre-cosmic state of the universe, rather than being characterized by a lack of agent to incite motion, represents lifting of the constraints on transformation of the materials so much so that it keeps all things away even from the possibility of reaching telos to the effect that all motion, if we could observe it, would appear to us to be ‘random’ and ‘chaotic.’

However, it does not imply that left to their own devices the materials would not behave in approximately determinate and “possibly even predictable

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63 Archer-Hind, 188, 225: “The gravitation of all bodies depends altogether upon their position in space relatively to their proper region; and the ‘weight’ of any body is simply the attraction which draws it towards its own home.”
ways such as we often observe today” (Ibid). Therefore, even when there were only “traces” of recognizable shapes of the regular compounds of materials that get formed in the cosmos, different kinds of fire, water, air, and earth already kept to their “own definite natures” (Ibid). That being said, the “ferociousness” of motion in the pre-cosmos cannot be explained by differences in the “temperaments” of the traces that can act on one another distantly, as it were, because there is no independent force in nature.64

Simply by virtue of their existence traces would not be able to cause any motion, it being the product of dissymmetry between things that do and do not have affinity with one another, as is the case with proportions in which constituent elements are found in various materials in the cosmos.65 As it is evident, the absorption of traces into chaotic motion could result in an infinite fold of four kinds of the elements. But, some kind of separation still would have to be in place, because otherwise even the least of motion would be impossible, on Plato’s account, the movement in circles being unavailable to soulless materials par excellence. Thus, the inanimacy of the sensible materials seems to leave the origins of the appearance of “traces” in the pre-cosmos wanting. Of course, Plato would want to say that fire, now as ever, heats objects that are in close vicinity to

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64 See Archer-Hind, 1888, 166: “In the first place it is necessary once for all to discard the notion that Necessity is in any sense whatsoever an independent force external to Reason: this would be totally repugnant… to the cardinal doctrine of Platonism, that the only principle of motion is soul. For this reason we must not suppose that there is in matter as such any resisting power which thwarts the efforts of Reason: this is an absolute misconception. Matter, qua matter, being souls, is entirely without any sort of power of its own: whatever power it has is of soul.”

65 In fact, Timean physics seems to deny the possibility of existence of “pure” mixtures of the elements, all things in the world being compound products of the mass of the elements fused together in various proportions. Likewise, the exact combination that we get appears for a larger degree depends upon the quality of the constituent triangles out of which the particles were constructed. See 73B: “For the god isolated from their respective kinds those primary triangles which were undistorted and smooth and hence, owing to their exactness…”
it, but this is not to deny the fact that it is fire that precipitates the reaction of heating, and not something else. But whence fire comes from, as different from water, for instance, in the first place? How did a region of space dedicated only to it ever come about? How come it not be smashed in the process of transformation of the elements? How come anything at all be in space? As moving where and from what? In the last analysis, what is the principle of like-to-like other than Plato’s own fancy? Why should we believe that motion will unfailingly produce all these traces? Even granting that the only “traces” that were in the pre-cosmos are the traces of the elements, it does not help to solve the enigma of their generation. This raises the question as to what is the cause of existence of traces in general.

In the cosmos, transformation of the materials is dynamic and forms an intricate web of complex structures. It derives from locating the “affections” (e.g., hot, cold, wet, and dry) that attend the elements “in the proper structures to the proper degree” (D. Miller 2003: 149) because the elemental components of bodies and organs of mortal creatures are constantly being lost and replenished. Motions that regulate the ebb and flow of the generated organic and inorganic compounds in the body as well as in various functional structures all have a starting point in the soul, since ‘the principle of causality, as Plato understands it, is ultimately the principle of agency’ (Taylor 1928: 63-64). It is soul alone that can “set itself as well as other things in moving” (Soph., 894B9).

Thus, Plato says, on behalf of the world-making Intelligence the materials “enter” the cycle of generation and perishing in the universe in which there are beautiful organic formations that not only are generated, but also growing right in their midst and where they also provide sustenance for the bodies of sublunary
mortal creatures, who virtually age and reproduce in the company of gods (i.e., fixed stars).\textsuperscript{66} In this way, we are told, Intelligence persuaded Necessity ‘to direct most of the things that come to be for the best.’ As I have argued above, the sovereign right of the Intelligent cause over the generation of things would not allow the soul to “cause” any wild or chaotic motion, but only circularity, rhythm, and order. Accordingly, Gadamer claims that one may never dissociate the soul from “special, orderly character of movement proper to what is alive and thereby reduce its work to mechanical causality” (Gadamer 1980: 166-170). It is clear that this condition would not hold in the case of the moving “traces” populating the pre-cosmos because soul first had to be shaped by the Demiurge, as Plato explicitly states in the account of the genesis of cosmos.

At the same time, even after the universe came to be, Necessity made it so that the it is not the materials’ holy duty to work as planned, since they lack intelligence. At any time, they can suddenly change the direction of motion, upset our calculations, or in any other way interfere with our plans unexpectedly. Because no effort of Intelligence can change this state of affairs, I called it the immanent and timeless condition of the material. Apparently, there is something which by cutting across the whole of the intelligent life on earth perpetuates

\textsuperscript{66} Cf. Tim. 58A4-B1: “The revolution of the Whole, when it had enclosed together the kinds <of the four elements>, being spherical and naturally tending to come together upon itself, compressed all things and allow no empty region at all to remain.” D. Miller, commenting on this passage, stresses that, for Plato, the generation of the elements as we know it owes to Intelligence. It is clear, Miller argues, that “the rational motion of the world’s soul and the rational motions of celestial bodies (the gods) do in fact control the production of the ordered compounds of which animate and inanimate things consist; these thing are not, for Plato, solely the products of mechanical causes” (D. Miller 2003: 148) Likewise, D. Miller claims that at 58A-C Plato “does not explain the pre-demiurgic state where only “traces” of elements moved about in a disorderly manner, but attempts to show the Demiurge’s fashioning of an enclosed, single living world and his making of geometrically shaped elemental bodies caused the regular production of the compounds we see about us” (D. Miller 2003: 149).
separation of the materials, without which there would not be the kinds of transformations made possible in the universe by the world-making Intelligence. That being the cause of transformations that are not confined to coming to be and passing away pure and simple, but rather involve the dynamic nature of processes the cumulative effect of which is to let the organisms grow and reproduce.

Recall ‘the great billowing river’ that causes the revolution of the Same in infants to stop until they grow old enough to resume it, which I think illustrates perfectly a kind of transformations that surround the soul from the cradle and without which our life would be incredibly poor. Additionally, harm brought to the body in case of malfunctioning of some organ because of the excess or lack of the constituent elements in a given structure would also count as an example of such a kind of transformations. Furthermore, these include the physical balances of hot and cold and wet and dry in nature that make, in contrast, both for the health and strength of the individuals as well as for the change of seasons and different climates that constitute the environment for the mortal creatures, on which their physical survival depends. Finally, the whole range of phenomena that produce various “beautiful conditions in souls” (*Phil.* 26B6-7) fall under that kind.

§27.*Nature of the Receptacle.*

We have here what I will call a well-delimited situation in which the decrease and increase of the heterogenous mass of the elements “whenever anything is seen now here and again there” as part of the movements agitated by Necessity vicariously form part of the intelligent life so long as they satisfy the necessary conditions of gathering of the beautiful organic formations. It now becomes clear in what sense the indifference to the objectives of Reason is the immanent and timeless condition of the material. The cause of the separative
movements of the elements does not need to have a projectable beginning at all, if we are to make sense of how “traces” appeared in the pre-cosmos when they moved around in a disorderly manner. Therefore, that which must evidently “sustain” them perpetually in motion is, strictly speaking, not part of what came to be (i.e., not a member of the second Kind), but something more fundamental on which it depends. The point I want to make is this: Plato could account for the existence of “traces” in the pre-cosmos if there were something that makes the elements fly off in different directions, while itself not being part of the entities that come into direct physical contact with one another “whenever anything is seen happening now here and again there.”

What we need here is in truth a third factor of the generation of the elements (besides soul, and the elements themselves with their distinct natures) “in which” they permanently have the possibility to appear. “That in which” for the coming-to-be of the elements, being common to them all, unevenly swayed by the “powers,” or “affections,” attending to them by their nature and, on their account, made non-uniform throughout the whole of itself could be an entity that fulfils these requirements. Fortunately for him, Plato thinks that there is such a thing, and he is going to call it the third kind of thing, on his account, the receptacle and wet-nurse of all becoming (or ἁμρα). He says that the elements affect the Receptacle by virtue of their geometrical shapes of their bodies and attendant qualities or “powers.” The Receptacle withdraws before what it is in its nature to “receive” and therewith “holds” all things in itself, providing every one of them with a place in which they can appear all at once and in this way be. Four kinds of elements and everything made out of them have a permanent representation in the face of the all-receiving nature of this mother-foster. He says
it is being “shaken” throughout itself by different “powers” or “affections” it receives and makes the things be “shaken” by it in turn.

For that reason, Plato says that the mechanism of “that which receives” is similar in its operation to a winnowing sieve that sends off dense and heavy elements in one place and light and rare to another. It is beyond the scope of the current thesis to discuss the Receptacle in depth, but what it does, on Plato’s most succinct description, is precisely to ‘provide a situation for all things that come into being’ (49A; 50D-50E). Accordingly, at 52E2-58A1 Plato argues that the non-uniformity sowed in the Nurse by the diverse “powers” of the elements is the condition for the possibility of motion, so to speak. Plata also notes that the “shaking” of the Receptacle to the cosmos is like exercise that keeps an organism healthy to a body. Accordingly, Robinson argues that Plato emphasizes in the Timaeus by mentioning phèrein at 48A6-7 the basically contingent nature of the moving “traces” (ichnē) that populate pre-cosmos. He claims that the invocation of the notion of the receptacle of all becoming, or Space renders complete Plato’s metaphysical schema:

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67 Tim. 52E2-58A1: “For it is difficult, or rather impossible, for something to be moved without something to set it in motion, or something to set a thing in motion without something to be moved by it. When either is absent, there is no motion, but [when they are present] it is quite impossible for them to be uniform. And so let us always… attribute motion to non-uniformity.”

68 Plato returns to a lucid image of Nurse at 88D6-89A2, explaining that if someone maintains the motions that help him avoid the ill-effects of the affections of the environment and (e.g.) food, then he can be said to model “himself after what we have called the foster-mother and nurse of the universe and persistently refuses to allow his body any degree of rest but exercises and continually agitates it through its whole extent, he will keep in a state of natural equilibrium the internal and the external motions. And if the agitation is a measured one, he will succeed in bringing order and regularity to those disturbances and those elemental parts that wander all over the body according to their affinities… He will not allow one hostile element to position itself next to another and so breed wars and diseases in the body. Instead, he will have one friendly element placed by another, and so bring about health.”
While their existence and movement may be beginningless and sempiternal, they are nonetheless infinitely far from enjoying the uncontingent, eternal existence that characterizes the Forms. Given this contingent status, such traces will need a matrix as a non-contingent “sustainer” of their motion, and this precisely is the role played by Space, or in terms of its role in the scheme of things, the Wandering Cause (Robinson 2004: 84).

Nurse, Mother, Necessity, Space, chōra, and Wandering Cause are the names of the items of the Timaean cosmology that in one way or another represent different aspects of the third kind of thing, the receptacle of becoming. In Chapter I I have given a comprehensive list of different terms Plato uses to refer to it. Now as Plato tells us in the Nurse Analogy (52E), the “shaking” of the Receptacle essentially describes an ongoing process as much as a primordial one. For if the shaking, the cause of separation, were to cease then ‘the elemental bodies would be pressed into a homogeneous mixture from which practically nothing could be construed due to the absence of proportionate quantities of different elements’ (D. Miller 2003: 150). The nature of the foster-mother and wet-nurse of all becoming is to sustain the elements in motion through “shaking” in effect of which elemental bodies of the same kind along with their attendant “affections” or “powers” are grouped together by a process of separation of the kinds from one another on the basis of the principle like-to-like. As D. Miller observes, ‘the result of this grouping is that collections of like elemental bodies no matter what to have a proper place’69 (Ibid.).

Like the Forms and the Demiurge, the Receptacle is indestructible and everlasting. Furthermore, it is invisible and immaterial and does not have any

69 See Tim. 57B7-C6: “In accord with these interactions all of the <elemental bodies> exchange regions (chōra); for on account of the motion of “that which receives” [i.e., the Receptacle] the multitude of each kind has stood apart <each> at its own place (topos): those on each occasion that have become dissimilar to themselves but similar to others are carries on account of the shaking towards the place (topos) of those to whichever they have become similar.”
specific character of its own, “its only but crucial purpose being to provide a
neutral, non-intrusive matrix on or in which” (Robinson 2004: 12) what Plato calls
the “traces” of the future elements earth, air, fire, and water may permanently
appear. As Robinson puts it, in that its natural vocation is to function like a foster-
mother and wet-nurse of all becoming, the Receptacle shares something in
common with the features of these three things: a) Space, because it “contains”
traces of what will eventually be called matter; b) malleable substances such as
gold, considering that it at various “moments” in its non-temporal duration it is
characterizable as “looking like fire,” “looking like water,” and so on, depending
on the ‘concentration of “traces” of the four elements that have been produced by
the random motion that characterizes them, by the laws of centrifugal and
centripetal motion that operate even in the pre-cosmos’ (Ibid.) and by the
movements (“shaking”) of Space itself; c) a mirror, in that it has been reflecting
Forms of the elements even before the beginning of time.

In his final analysis, the strange and subtle nature of the third kind of thing
receives from Plato the name of chōra. Although chōra translates as space, it is by
all means far removed from its conceptual counterparts in the Cartesian notion of
pure extension, Newton’s absolute space, and the Euclidean space, to which we
have grown accustomed, for it is not possible to explain how space can shake.70
However, as D. Miller’s study suggests, the Receptacle does really shake, so it
cannot be space.71 Chōra provides “the possibility of distinguishing up and down,

70 Recognizing this, the adherents of space interpretation attempted to explain away
shaking of the Receptacle as not intended to be taken literally by Plato. For instance,
Taylor, 1928, 352, says that “the about the action of the contents of hypodoche on the
hypodoche itself, which shakes it, is purely mythical.” And Cornford 1937, 209: “Plato
cannot mean that Space really shakes or is shaken by the qualities [of the elements].”
71 Moreover so, chōra can neither be said to be place. “We do not think that the place can
shake, if for no other reason that shaking is a form of locomotion. If place were to shake it
would change place. This makes no sense” (D. Miller).
here and there, an originary separation and dispersal of Being into beings with position with respect to one another” (Bianchi 2006: 131). It is not hard to see that, because of the irreplaceable part it plays in the Timaeus’s cosmological model, as soon as the Third kind is introduced “one will no longer be able to say… that there are only intelligible and sensible beings” (Sallis 1990: 123).

This chapter has been a fruition of the analysis of Necessity. I tied the motion by Necessity to the necessary conditions of life. And my analysis revealed that the two metaphysical kinds or categories of things are not enough to do the whole job of cosmology in the part of addressing the Wandering Cause. I have shown that from one point of view the existence of something that has a nature to *phérein* ultimately boils down to sharing with the soul the mission of preservation of the body. Thus, we have arrived at the notion of third kind of thing, or the receptacle and wet-nurse of all becoming. The Receptacle, being stirred thought itself by diverse “powers” of the elements it receives, shakes them in turn and causes separation to appear. “Shaking” of the Receptacle has no formally delineated starting point, but it does form part of the motion caused by the soul. Though it is *not* another cause of motion. It can be best pictured as the condition for the possibility motion, the primary cause of motion being the soul. As I have argued, timeless relocation of the elements into separate regions of space on behalf of the Nurse is what allows mortal creatures to age and reproduce and lead their dynamic way of life.
Chapter V. This-such passage.

Towards a theory of nature – Elemental inter-transformation – Anticipating the Receptacle


In the last chapter, my account of the Receptacle mostly grew out of the assumption that the third kind of thing gets introduced in the *Timaeus* as a posit of purely theoretical necessity, rather than something that can be established by a consistent argument. The exigencies of classing the Receptacle as a kind of thing in its own right that is admittedly contentious is, nonetheless, organic with Plato’s claim that the nature of the Receptacle forces us to engage in a sort bastard reasoning (52B2). Though it certainly does not preclude us from speaking about the Receptacle as clearly as it is possible. In what follows I will present what other, more concrete evidence Plato gathers from experience to make a case that the existence of the Receptacle must needs be a reality.

My major claim in Chapter II was that part of what Plato may be seen as doing in the *Timaeus* is demonstrating that physics is not a rival to the Theory of Forms for the title… of one correct *episteme*. I have argued that it is also the case that Plato’s *Timaeus* is complete without going to the absolutely first principles of all things, these being known only to a man who is dear to god (53D4-7). But in so far as he has stepped on the track of illuminating the influence of Necessity on

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72 If Plato decided *not* to discuss the Third kind in the *Timaeus*, he would still have a lot to say about the contributions of the four kinds of elements to Reason in terms of the phenomenal qualities *if and only if* he retained the postulate that the inanimate materials are subservient to the world-making Intelligence. For example, “instead of saying that god made bone-marrow starting from particularly ‘undistorted and smooth triangles’ (73B5-C3), he could have said that the process started from particularly pure samples of the elements” (Broadie 2012: 236).
the course of things he must now tremendously increase the importance of
deepening our understanding of the processes taking place in nature. The form it
takes in Timaeus’s account is a rejection of the naturalist teachings that attributed
to fire, water, air, and earth the status of ‘the letters of the universe, telling people
they are its principles (arche)’ (48C1). To clarify, natural scientists believed that
all living beings evolved out of these four kinds that constitute the elements of
nature, as it were. The Greek word Plato uses for the elements and letters is the
same: stoichea. As Sallis notes, ‘in play here is the original sense of stoicheon as
letter (as unit or “element” of discourse) and the question of the appropriateness of
extending that sense from the sphere of logos to that of phusis,’ an extension first
ventured in Plato’s Theaetetus73 (Sallis 1990: 94).

In general, Timaeus seems to be welcoming of the view that what
something is made out of is determined by what goes into it — that is, its matter
determines its substance — and even applies it in his own theory in some places.74
Nevertheless, the cosmological model Timaeus constructs leaves us no place to
imagine that the circulation of the elements alone would suffice to produce the
beautiful organic formations. However, Timaeus's turning of tables does not stop
here, because by making the true cause of the genesis of cosmos the Craftsman he,
in effect, leaves the study of all things natural in a precarious position.

For when we ask with Timaeus what we should think explains the
properties of fire before the heaven’s coming-to-be we are no longer in the
province of science like physics. Technically speaking, the postulates of physics
cease to apply when we move beyond the ordinary objects of experience to

73 Tht. 201E. See Cornford, Plato’s Cosmology, 161 n. 1.
74 Cf. Tim. 88D1: “the body is heated and cooled inside by things that enter it,” — and
made to undergo that which accompanies these things.
consider things that have as a vaguely defined ground of motion as traces in the pre-cosmos. On the basis of this assumption Timaeus is led to explore as justified the question what if there was and still is present a simpler foundation of the division of things into hot and cold, wet and dry, and such than what we observe in the coagulation and dissolution of the elements proceeding according to “shape and number” that their compounds acquired at the Demiurge’s hands? Plato supposes that we can divorce the nature of the four elements from the sensible qualities by which their regular compounds are recognized and known as such in the phenomenal world, which is what Aristotle understood by the “elements” at least (Lloyd 1968: 166-169).

To reiterate what I have said in the previous Chapter, Plato is committed to a view that the four materials of the naturalists are not ultimate: fire and the other elements have a generation, which it is the business of cosmology to account for. In *this-such* passage, this idea of their having a generation “is helped forward by a claim… that they turn into each other in regular cycle” (Broadie 2012: 188). Plato suggests that phenomena to which we are used to referring when somebody asks us to explain what things like fire, water and anything of that sort are, in reality, do not in the least correlate to how they are thought of by us. He argues that a knowledgeable person will not even dare to put the elements in the ranks of the “syllables” (48C2). To paraphrase Plato here, the way we treat the phenomena does not satisfy some criteria that he thinks will make our references to the elements worthy of a name of trustworthy, stable, firm, and sure *logos* (49B3-8).

Because of this, the number of problems Timaeus faces in making progress in his account grows exponentially. For suspecting the words fire, etc. to be ambiguous terms by the same token puts the discourse on cosmic production in
the precarious position. Somehow the sovereign right of divine or noetic causes over the generation of all things appears not to include the generation of the elements because ‘rather than being captured by logos and assimilated to it, fire and the others flee from it, retreat before it, elude it’ (Sallis 1990: 105). We have names for these things, but what each of the elements is in its own right does not let itself be expressed by us in speech with a sufficient degree of precision. Granting that it is so elusive, to what then, on Plato’s account, are we to attribute the coming-to-be of the elements? How are we to overcome challenges posed by the generation of the elements to metaphysics underwriting the discourse on cosmic production and resume speaking about the paradigm and a product made to look like the paradigm?

§29. Elemental inter-transformation.

It would be absolutely impossible to make any progress in the cosmology unless we found a way to discourse reasonably about the coming-to-be of the elements without narrowing it down to conceptions that are alien to what they essentially are, namely, the images of Forms. Before, the fundamental distinction was between two metaphysical kinds or categories of things. They sufficed for the cosmology’s first beginning and were exemplified by the case of the paradigm of this cosmos and the cosmos itself. But it is apparent that at this point in his discourse Timaeus would not be able to move forward if he does not have at hand a ‘more ample’ division that would not be so easily short-circuited by the issues related to coming-to-be of the elements. So, now his discourse ‘seems to force’ recognition of a Third kind as well. To ensure that the introduction of the Third kind does not come simply by a sleight of hand, as well as to help ground it in
empirical facts Timaeus says that it is “necessary to start with a preliminary puzzle about fire and the <elements that are> in conjunction with fire” (49B2):

We see (or think we see) the thing that we have just now been calling water condensing and turning to stones and earth. Next, we see this same thing dissolving and dispersing, turning to wind and air, and air, when ignited, turning to fire. And then we see fire being condensed and extinguished and turning back to the form of air, and air coalescing and thickening and turning back into cloud and mist. When these are compressed still more we see them turning into flowing water, which we see turning to earth and stones once again (49B9-C8).

Plato illustrates that what each of the so-called elements appears to be for the short duration of its existence does not stay the same permanently, but is rather always seen as changing. Accordingly, the trouble is that “since these phenomenal stuffs keep changing, how can we say that any one of them is really one thing (e.g. water) rather than some other?” (Gill). It would seem as though considering that the observed elements appear to continually all turn into one another, we are not more justified in calling this this, than water water. For, again, if fire changes into air, during the change fire is no longer fire, but then what thing we should think it is that is changing? Is the existence of grammatical subject of this sentence endowed with anything more than linguistic reality?

What I mean is that the cycle of change Plato describes here is so open-ended that one could argue that if we go far enough in the direction in which he is pointing then it would land us in a controversial, if not to say contradictory, conclusion that nothing really matters because all things are by nature interchangeable with one another. This interpretation of this-such suggests that what Plato is really after here is a flux ontology of particulars, but it is out of hand to discuss this at the present moment. That is not to deny, however, that some kind of flux is still at work in nature, on Plato’s account. I propose to call it,
provisionally, by the name of the (phenomenal) flux just what we find at the site of change of the elements, except in the cases where I specifically refer to flux as in “all things that exist *simpliciter* are in flux,” which is primarily a subject of the following Chapter. My goal in this Chapter is merely to present as faithfully as it is possible the significance of the cycle of change in which we can see the elements revolve continually without engaging in any interpretation of it.

As it can never be made too clear, the fact alone that we see what we have named water turning into stones and so on by itself does not immediately set up the ground for a broad and wide ontological statements on the nature of particulars. It bears emphasizing that the transformations listed by Plato in the described cycle of change reflect none other than the fact that there appears to be a constant transformation in every case, but not that the elements are transforming at every moment.

Now because the elements happen to be confused with things that have severally distinct and unchanging identities Plato will want to argue that when we attempt to refer any one of them, “whatever it may be (e.g. that it really is fire)” (Broadie 2012: 187), as this or that we end up looking foolish (49D2). To recapitulate, the puzzle that Timaeus is addressing to his audience concerns the way in which the observed elements collectively appear to us. How can we even refer to something which is either coming to be fire or else is ceasing to be fire as such and coming to be air as such or some other element, but never is, properly speaking, fire itself? As D. Miller puts it: “If an element never is the one thing that it is (or, should be), what is it, how shall we refer to it?” (D. Miller 2003: 78). We see that the elements produce different affections in things, but what we do not see or maybe do not reflect in our speech well enough is that there is also a
phenomenal flux because of which these four kinds of “elements (sic!) transmit their coming-to-be to one another in a cycle, or so it seems” (49C8-9).

We cannot definitely say that the referent of this is, for instance, fire any more so than we are entitled to call it by the names of any other of the elements (e.g. water, etc.) because, on Plato’s observation, none of the “things we think we are designating as something when by a way of pointing we use the term ‘this’ or ‘that’” (Cherniss's translation [49E1-2]) are essential to coming-to-be of the elements as such. Plato contends the source of our acquaintance with the elements lies in the flux, rather than some kind of thing in the phenomenal world to which we can point, because fire, etc. “gets away without abiding the charge of ‘that’ and ‘this’ or any other expression that indicts them of being stable” (49E3-4). In light of this, the ontological status of the four kinds of elements is left hanging in the air because even when we see water what we perceive is ipso facto a continuous change of coming to be water and ceasing to be water (i.e., flux). Then, by perception we “isolate a stage of the process and call the object “water,” referring in our minds to the Form of water… But, if we are to speak accurately, the object of our perception is even now changing into another element” (D. Miller). So we cannot “bring it to a halt” by a “trustworthy and steady statement” (49B5; cf. Th. 157B7) and say that it is “water rather than fire” (49B3), paradoxically.

Thus, in the case of the elements, because they all come to be at once, it is not clear just what we should count as the thing that is changing: “We cannot say about any sort of them that any one at all is this and not another” (49D2-3). Again, are we justified in thinking that there is such a thing at all? Does it exist simpliciter? Can it be adequately represented by us in speech and, if so, how
should we call it?\textsuperscript{75} Granted that we have accepted Plato’s puzzle as valid, in order for us to make sense of the elements and get around the fact the our statements on the nature of the observed elements look awkward, rather than calling them “this” or “that” (τούτο), Plato advises that we consider that we can speak about four kinds as “such” (το τοιούτον) with more safety:\textsuperscript{76}

[T]he safest course by far is that we determine that we shall speak of them as follows: that which we always see coming to be somewhere at one time and somewhere else at another time, as fire, <it is safest> on each occasion to call it, fire, not τούτο but το τοιούτον, nor <should one call> water τούτο but always το τοιούτον… (49D1-4)

I have broken off at this point because for the next sentence Zeyl (2000) and some other commentators of this ancient text have adopted a somewhat tendentious translation, which renders Plato’s words in this way: \textit{“never to speak of anything else as “this,” as though it has some stability, of all the things at which we point and use the expressions “that” and “this” and so think we are designating something”} (49D5-8). The problem that I find with this translation is that it takes the τούτο-τοιούτον distinction to be applicable to all things that come to be (γενομένων) in general. As D. Miller remarks, this may be true, but Plato does not argue for it, at least not here (D. Miller 2003: 80). Her own translation reads

\textsuperscript{75} An attentive reader would recognize at this point that Plato keeps ready for us a single answer to all of these questions at one. A (third kind of) thing that we should say on every occasion appears to be fiery and moist and so on is, truth be told, none other than ‘the receptacle of all becoming and its wet-nurse, as it were.’ However, there is hardly a systematic account of the precise way in which it is supposed to work that we can rely on for the explanation of what role the Receptacle plays in the generation of the elements, which is why this topic causes such heated discussions to this day. To my knowledge, the best attempt that has so far been undertaken to collect all the different strands of Plato’s argument in the Timaeus concerning nature of the third kind of thing to form a whole and coherent picture of the Receptacle is Dana Miller’s brilliant study of \textit{chôra} and the Receptacle entitled Third Kind in Plato’s Timaeus (2003).

\textsuperscript{76} 49B2-50A2 on ‘this’ and ‘such’ allows for different choices of translation and interpretation. See Zeyl, 2000, lvi-lxi, for a clear exposition of the different possibilities and references to previous scholarship. In the course of the following Chapters, it will become clear that I am embracing what he calls the ‘traditional’ interpretation.
“…nor at any time <should one call> any other element anything, as though it is something having steadiness, <like> such things as we point out by using the expression τόδε and τούτο, thinking that we are pointing something out.” Below, I try to explain the meaning of Plato’s words here without siding either with how it is understood by D. Miller or Zeyl et al.

Basically, Plato admonishes us against equivocating the referent of what we name using an expression “this” in one sentence with fire, on the one hand, and multiple fire-like things all different and distinct from one another such as we always see coming to be and passing away, on the other. Strictly speaking, it does not behoove the former kind of thing to be called “this,” for the reasons indicated above, whereas in all other instances, as Plato claims, we should rather refer to the elements as “such.” All denominations of phenomena that fail to satisfy either one of these criteria are an “embarrassment,” because, on Plato’s account, “τούτο describes a thing as being an entity in its own right, a permanent subject which, while possibly undergoing various modifications, yet retains its identity” (Zeyl 1975: 146). I will argue that it does not imply, however, that Plato has any interest in making the distinctive names of the elements designate something other than e.g. water we can see and touch, and smell and so on. Plato’s argument is not that if somebody asks us what “this (τούτο) thing” is when pointing to the glass of water we should reply that it is not water, but something else. The puzzle is that even though the case is as he has described it, Plato wants to show that what we say is not actually wrong (D. Miller 2003: 78).

The goal of the preliminary puzzle is to show that when we suppose the terms like “fire,” “water,” etc. to refer to something that is on its own right, a phenomenal flux short-circuits all our attempts to pronounce a definitive statement
on the nature of the elements we observe. Thus, when Plato argues that “this” does not apply to what we have named fire, he wants to say that fieriness we now observe is not “indicated by a special term that is proper only to a single thing, e.g. fire” (D. Miller 2003: 84) and that nothing in the phenomenal world is entitled to that status.

§30. Anticipating the Receptacle

When we point to something saying that e.g. fire is “this” or “that” we are led into thinking that the referent is in each case some one thing. However, Plato is squarely opposed to counting the logical subject of the sentence “this is X” when it is said of fire as a noun. We must understand the terms ‘fire,’ ‘water,’ etc. not as this-words, i.e., nouns each referring to a this, but as logically adjectival, that is, indicating a qualification, or that something is qualified. (On this formulation, the term ‘fire’ stands the subject qualified in a certain way, rather than the subject as such that is qualified.) We are accustomed to viewing the elements as some objects in the phenomenal world that each always continues with its own unchanging nature. But Plato is aiming to win the acceptance of his notion of the third kind of thing, the Receptacle. Accordingly, he problematizes the inter-transformation of the elements in the linguistic way, “floating the impression that our ordinary use of ‘fire,’ ‘water,’ etc. is open to an embarrassing puzzle and paradox” (Broadie 2012: 187). He makes a claim, supposedly based on observation, that what an expression “this is X” implies does not hold true in the case of the elements. I am indebted for pointing this out to the comprehensive adjectival analysis of Plato’s critique by Sarah Broadie:

Expression indicating this or that are properly used of a subject that is stable in the sense that its nature is permanently what such an expression implies. It is a mistake to use ‘fire’ etc. as if they were this-
referring nouns, precisely because ‘fire’ applies and then ceases to apply; and so with the other terms for the corporeal elements. The applicability of these terms constantly goes round and round, i.e. their applicability is on and off and on again, and so on unremittingly, because the referents are subject to genesis (sc. from each other) (Broadie 2012: 187).

Plato inserts the description of the elemental interchange to support his view that the expression “this is fire” mistakenly renders as a noun an entity which, rather a thing that is water, earth, and air in its own right, merely appears to be fiery, moist and so on as if in the cycle. Again, in the case of the elements it is unclear what changes. What the thing is that undergoes all the changes we see the elements undergo? Technically speaking, we cannot point to fire and say, “Fire changed into air,” because there is no longer fire at which we may point; it flees as soon as we name. And this puzzle, Plato thinks, “may help us to realize that, with regard to the elements, there is an essential factor in what the elements are that our senses fail to observe. In the elemental change we observe change but we do not observe what it is that changed. What we do not observe is the Receptacle” (i.m.) (D. Miller 2003: 74). In Plato’s judgement, what we actually refer to when we call the phenomena by the conventional names of the elements — as when we say ‘here, look, it is fire’ — is ‘the receptacle and wetnurse of all becoming,’ as Plato tellingly describes it. For the coming-to-be of the elements, the Receptacle is “that in which each one of them always coming to be appears and again from there vanishes” (49E7-8).

Thus, Plato asserts that “there is something utterly non-empirical which fire etc. are necessarily in” (Broadie 2012: 188). So, Gadamer: “Evidently what is meant is that the pure “that” of any given thing is something which we experience as space, much as in first touching something we hit upon it without being able to identify it as what it is” (i.m.) (Gadamer 1980: 174). The Receptacle, or chōra, is
a member of the Third kind, the function of which is to receive in itself the whole of the Second kind, that which is always coming into being. However, the evidence presented in *this-such* passage alone would clearly not suffice to convince naturalists that that they are wrong about the nature of the elements. Indeed, rather than explaining why the elements need to have “that in which” they come to be and pass away is necessary, Plato just makes a nuisance of our ordinary use of language.

Sarah Broadie, who sees *this-such* passage primarily as a puzzle about what it does and does not make sense to say about the elements, argues that “To motivate postulating the Receptacle, Plato has to exhibit fire and the others as essentially qualifications, the terms for them as essentially adjectival. Once this is complete, then the picture cannot be complete without postulating a subject which they qualify, a fundamental *this* on which they depend. For qualifications, like adjectives on the linguistic level, are essentially dependent on something of a different category. But how does he show that fire and the others *are* no more than qualifications, their names no more than adjectives?” (Broadie 2012: 188) Broadie naturally believes that Plato’s account of the elemental interchange by itself does not suffice to provide a firm proof of the existence of the Receptacle. She is of the opinion that in *this-such* passage Plato’s argument is forced to run around in circles. There is truth to her words because in a sense, having suspected the actual existence of the referent of “this” jointly with fire, etc. as a product of confusion of the linguistic reality and existence as such, Plato ends up asserting a purely linguistic reality of existence of the Receptacle as something that is the case in the proper sense of the word.
From that point of view, Plato’s declaration of the existence of the Receptacle in this *such-passage* appears as not saying anything substantial, which I find somehow unacceptable and commentators of this ancient text do as well, because there is not another as wildly contested single passage in the whole of the Platonic corpus as *this-such* passage. As it is evident, Plato can be made liable of circular reasoning if and only if in the first premise of his argument he is taken to be casting a shadow over the existence of particulars as unreal. However, attributing to Plato a view that we should say that fire, water, etc. *are* only in a restricted sense involves a separate argument to the effect that the cycle of change described by Plato is one in which the particulars are ontologically destitute of durable being. As I will show in the next Chapter, some scholars have been particularly inventive in creating different reasons why Plato’s suggestion that we should to refer to fire, etc. as τοιούτου instead of τούτου hinges on existence of the radical flux in the world. However, whatever is the case, just how it is supposed to work with *this-such* passage is not at all clear to me. Accordingly, in Chapter VI, I will defend my own reading of the relevant passage in which I take it to be saying something that on every counting does not come anywhere near subscribing the expanded metaphysics of three Kinds to some version of flux ontology.
Chapter VI. The Two readings.

The referent of “such” – Elements, not phenomena – Denomination of phenomena
– Phenomenal flux

§31. The referent of “such.”

In much of the literature generated by the questions related to this-such passage (49C7-50B5), different authors have expressed different opinions about nature of the reform of the way in which we refer to phenomena that Plato proposes. As D. Miller remarks, “perhaps no passage in the Timaeus has been examined more closely and more frequently in recent years than this passage” (D. Miller 2003: 78). In the previous chapter, we have already had a chance to acquaint ourselves with the overall trajectory followed by Plato’s argument in these lines. To reiterate, Plato addresses us with a ‘preliminary puzzle about fire and the elements with it,’ in which he asks what’s the right way to refer that to a thing revolving in the described cycle of change, 49B9-49C6. He asserts that the observed elements “transmit their coming to be one to the other in a cycle.” He also makes a general case that each and every one of them ‘flees as soon as we name it.’ As a consequence, we cannot even say ‘about any sort of them that any one at all is this and not the other,’ in spite of the fact that at the same time we believe that we can distinguish one from the other.77 Thus, Plato suggests to replace an expression “this (τούτο) is fire” with a formula “such (τοιούτον) is fire.” In this Chapter, I will assess the views espoused by different authors on the subject of generation of fire, water, air, and earth and the associated phenomenal flux and present my own interpretation. I will argue that Plato was comfortable

77 Cf. D. Miller: “The puzzle about the elements is that we are unable to say of any that it is “one and not the other,” and yet… we feel that we should be able to say that it is “one and not the other” about the elements” (Miller).
with the idea that there is an identifiable subject of the process of change which as a whole persists through all the transformations happening to it and stays relatively unchanged by things affecting it. In the case of the visible sense-objects, this is just true of all things that come to be and cease to be <F>, while not ceasing to be simpliciter.

Now because Plato poses the difficulty presented by an elemental change in this-such as one of language, “it is commonly held that his chief concern in the entire passage on elemental change is the proper use of language” (D. Miller 2003: 75). Thinkers who fall in the category of people who read this-such passage as a discourse on the limits of language often assume that “the fact of constant change causes a difficulty in how to speak accurately about the elements” (Ibid.). Zeyl, for example, believes that Plato wants to defend the ordinary ways of speaking about phenomena with the preliminary puzzle. On the other end of the spectrum, Cherniss, in his polarizing article “A much misread passage of the Timaeus” (1954), argued that “phenomena cannot be distinctively denominated” (Cherniss 1954: 128), but ‘far from saying that nothing can be called “fire,” etc. Timaeus explicitly states what should and what should not be so called’ (Cherniss 1954: 117). A way of reading the text inspired by Cherniss's translation

78 Cherniss’s 1954 interpretation bases itself on of the translation he advocated for the passage under consideration in which I now provide in full: “Since these [fire, etc.] thus never appear as severally identical, concerning which of them could one without shame firmly assert that this is any particular thing and not another? It is not possible, but by far the safest way is to speak of them on this basis: What we ever see coming to be at different times in different places, for example fire, not to say “this is fire,” but “what on any occasion is such and such is fire,” nor “this is water,” but “what is always such and such is water,” nor ever “[this],” as if it had some permanence, “is some other” of the things that we think we are designating as something when by way of pointing we use the term “this” or “that.” For it slips away and does not abide the assertion of “that” and “this” or any assertion that indicts them of being stable. But [it is safest] not to speak of these as severally distinct but so to call the such and such that always recurs alike in each and all cases together, for example [to call] that which is always such and such fire, and
interpretation attributes to Plato saying that there is nothing remotely corresponding to fire for us to indicate when by a way of pointing we say “this is X,” and offering, instead, a novel referent for the term ‘fire.’ According to this line of interpretation, the traditional reading of what the text directs us to do, namely, ‘not this but such on each occasion to call fire,’ is incorrect. The traditional reading holds that Plato’s argument has the following form: ‘do not call on each occasion fire (z) “this” (x) but “[what is] such” (y).’ Cherniss and his followers insist on reading it, instead, as follows: ‘do not call this (x) “fire” (z) but call what is such (y) “fire” (z).’ Thus, the two competing readings of this such-passage can be summarized in this way: ‘Do not call Z “x” but call it “y”’ versus ‘Do not call x “Z” but call y “Z”’ (Silverman 2002: 260). Although Cherniss was the first to popularize the idea that the Timaeus in Greek reads differently from what Plato is taken to be doing at the beginning of this-such passage in the English-speaking world, the seed of discord was already planted by Plato himself in the text when he wrote these highly ambiguous lines 49E3-E7:

\[ \text{ἄλλα ταῦτα μὲν ἐκαστὰ μη λέγειν, τὸ δὲ τοιοῦτον ἀεὶ περιφερόμενον ὃμοιον ἐκάστου πέρι καὶ συμπάντων οὕτω καλεῖν, καὶ δὴ καὶ πῦρ τὸ διὰ παντὸς τοιοῦτον, καὶ ἄπαν ὅσονπερ ἀν ἔχῃ γένεσιν.} \]

As D. Miller points out, “the words ἀεὶ περιφερόμενον ὃμοιον refer to the “circle” or “cycle” of change discussed at 49C6; ὃμοιον (omoion), an accusative of manner like χύχλον…διδόντα at C6, refers to the regularity of circular change” (D. Miller 2003: 80). It is generally true that what Plato is seen to be as doing in this-such passage oscillates between the positions towards which the translator was inclined

so with everything that comes to be; and, on the other hand, that in which these severally distinct characteristics are ever and anon being manifested as they come to be in it and out of which again they are passing away, it is safest to designate it alone when we employ the word “this” or “that” but what is of any kind soever, hot or white or any of the contraries and all that consist of these, not in turn to call it any of these” (italics mine).
the most in the modern debates between traditional and alternative readings when he or she was preparing the English version of the text. The lines 49E3-7 are a centerpiece of this-such passage. This is the single place where Plato defines what it is exactly that he believes is a thing that revolves in the described cycle of change and what is such as to be called in one sentence with πῦρ (fire) by the word “such,” given that whatever it is, on Plato’s account, it cannot be referred to directly as fire. Zeyl thinks the meaning here is that “what is such’ — coming around like what it was, again and again” — refers to “fire…and generally everything that has becoming.” Kalkavage (2016), however, renders it differently in his translation:

On the contrary, it’s safest not to say these things of any of them individually, but “of this sort” as it always courses around similarly — to call them that, concerning each of them and all of them together, and in particular, to call fire “what is continually of this sort,” and everything else whatsoever that has birth.

Whereas Cornford (1935) gives the following translation:

We should not use these expressions [i.e. “this” or “that”] of any of them, but ‘that which is of a certain quality and has the same sort of quality as it perpetually recurs in the cycle’ — that is the description we should use in the case of each and all of them.

Archer-Hind (1888):

The word this we must not use of any of them; but such, applying in the same sense to all their mutations, we must predicate of each and all: fire we must call that which universally has that appearance; and so must we name all things such as come into being.

Finally, D. Miller (2003):

So <it is safest> not to call each one <of the elements> “this” (τούτο), but concerning each one and all of them <it is safest> to call <them> thus: τὸ τοιόυτον that is always going round in a similar fashion, and in particular <it is safest to call> fire <what is> τὸ τοιόυτον continually, and <likewise> every <element> whichever has coming-to-be.
As it is evident, there are many directions in which the sentence stretching from E5 to E7 seems to pull Plato’s statement that we should refer to something as *to toioúton*, rather than *toúton*. I have highlighted in italics how different authors tend to translate the phrase ἀεὶ περιφερόμενον ὁμοιον in English and how, in light of this, the meaning of *omoion* changes. Cherniss argues for a meaning “always recurring alike,” i.e., πῦρ designates that which is “always self-identical in its recurrences.” Cherniss makes among other things the following claims: 1) “Phenomena cannot be distinctively denominated;” 2) the “distinctive names” we do use are to be applied to a “phase of the phenomenal flux;” 3) the word “this” must refer not to a phase but to the Receptacle (D. Miller 2003: 75). Cherniss’s interpretation of *omoion* is therefore the key to his controversial and much criticized claim that Plato wants to use *toioúton* not for the elements, not even to phenomena, but to “the self-identical characteristics.” I examine it in more detail below, but at the first glance an objection one can raise to it is that the word *omoion* Plato uses in 49E3-7 need not imply “recur” here (cf. Gill 1987: 44). Probably it simply means “go round,” as D. Miller translates it: “τὸ τοιοῦτον that is always going round in a similar fashion.”

Furthermore, considering that the reference here is to regularity of circular change (49C7), it may as well be the case that *omoion* does not imply “alike” in the sense of self-identical, but rather something like “similar,” as Kalkavage has it. For one thing, Cornford’s 1935 and Taylor 1928 translations recognize that reference and understand the neuter accusative singular *omoion* to modify *to toioúton*. “Martin, Rivaud, Taylor, and Cornford take τὸ τοιοῦτον…ὁμοιον as a single phrase…” (Cherniss 1954: 120). In Taylor’s view, the meaning here is that “similar qualities or groups of qualities are continually turning up in the course of
‘passage,’ and we are to give the names πυρ and the like to these similars without fancying that they are anything but similar ‘episodes’ in the unceasing ‘passage’” (Taylor 1928: 319). Cornford also believes that the referent of ομοιόν is qualities of e.g. phenomenal fire, or appearances that are “fiery.”

Cornford argues that Plato stresses that things we perceive are groups of qualities which, “though perpetually shifting, are sufficiently alike to be indicated by names” (Cornford 2003: 181). As he explains, Plato holds that visible things have no “substances” of their own and that we should not call anything “this” because it implies that things to which we refer are distinct and self-standing entities. Rather, we ought to use a different expression like “such” to designate these qualities which are recovered from time to time in the course of the phenomenal flux if “they so much as consent to accept the description” (50B6-7 in Cornford’s translation). So πυρ is “properly only a name for a certain combination of qualities or ‘powers,’ which appear and disappear and are always varying” (Ibid.). I would like to voice three objections to this view.

Firstly, it fails to connect the current passage to what Plato said before about how the elements appear to be passing on coming-to-be to each other in a circular manner unceasingly. If ομοιόν modifies τὸ τοιοῦτον then, considering that we are supposed to call fire and each of the other elements τὸ τοιοῦτον, “fire will be “similar” to itself as it “goes round.” But this cannot be right because the “going round” is one in which fire becomes air, which becomes water, etc.” (D. Miller 2003: 81). To put it differently, Plato really thinks that fire as much as any other of the elements that there are presents itself to us as a kind of thing that for the short duration of time that it exists is for that matter in the process of changing
into another element. It is radically impermanent and has changing appearance such that it cannot be similar to itself as it comes to be a fortiori.

Secondly, though Cornford is not clear on that point, his interpretation seems to suggest that he believes that Plato embraced a radical flux ontology, which says that there are no substantial “things” of which knowledge can be had because what we see are phenomena that are continually changing in every respect. Cherniss (1964, 1967) and a number of other authors (cf. Mohr 1985: 85; see also Ross 1951: 233) similarly accept a view that this-such passage allows for the possibility of the unceasing Heraclitean flux, because of which everything that is seen moving around in space is perpetually alternating its character and, hence, radically impermanent (Gill 1987: 34) in nature. This view is intimately linked with the belief that Plato what calls the properties of which we become aware are, properly speaking, things that have an ontological status of “images.” They are images of Forms that are correlated to “self-identical, recurring characteristics” of phenomena in Cherniss's 1954 influential essay. Qua images of Forms, phenomena, on Cherniss’s interpretation, are mere “transitory adumbrations,” and “as having no proper being of their own, they must come be in something that is real”79 (D. Miller 2003: 27). This is part and parcel of the metaphysical understanding of the Receptacle that has been criticized in Chapter III. I will not say anything more about, but, as D. Miller claims, at any rate, there is no textual evidence that in the Timaeus Plato embraces the flux ontology in any sense.

Finally, the main problem that I see with Corfnord’s interpretation is that although Plato makes a clear reference to sensible qualities, in the passage on the

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79 Cherniss 1965, 376: “An image is always a transitory adumbration of something else; and consequently it must be coming to be in something other than itself and thus cling precariously to being or else itself be nothing at all.”
observable elemental interchange he does not claim that fire is just that — a sensible quality. In fact, he has an elaborate theory of the geometrical construction of the primary bodies of the elements that “accounts for the sensible qualities that we perceive them to have” (D. Miller 2003: 85).

§32. Elements, not phenomena.

There are other commentators (Apelt, 1919; Bury, 1929) who “separate αει περίφερόμενον ὁμοιόν from το τοιούτον, which they take to stand alone as the designation to be used of “each and all” the phenomena” (Cherniss 1954: 120). They believe that “what is similar are phenomenal occurrences, or occurrences of ‘phenomenal fire’” and “argue that το τοιούτον picks out similar phenomena and indicates them as beings ‘of a certain sort’” (D. Miller 2003: 81). Archer-Hind exemplifies this view in his translation of the passage. Heexplains: “τοῦτο denotes what a thing is, το τοιούτον what we predicate of it. Fire is merely an appearance which the ὑποδοχὴ assumes for the time being: we must not say then ‘this portion of space is fire,’ but ‘this portion of space has the property of fire for its present condition.’ For the same portion of space may presently assume the appearance of air and of water; whence we see that the only permanent thing is the space; fire, air, water are merely its transitory attributes derived from the ὀμοιώματα impressed upon it” (Archer-Hind 1888: 173-174). In this section I will deal with Archer-Hind’s interpretation of what serves as the referent τοιούτον and consider whether if there is support for it in the text and on the basis of it argue against the view that the word πυρ is a generic term for similar phenomenal occurrences.

Archer-Hind’s interpretation suggests that Plato opposes referring to fire, etc. as “this” in order to show that the distinctive names of the elements derive
from the sensible qualities associated with the things that are alien to the notion of generation and perishing. Indeed, the cycle of change in which we can see the elements revolving continually does not allow us to pick out any one sort of them and say about it that it is, for instance, water, rather than fire. Because ‘they transmit their coming-to-be to one another in a cycle,’ if one element were to replace all others, we could say, probabilistically, that even then it is as ever susceptible to inter-transformation (not the case, on Plato’s account; see below and Tim. 54C). In that sense, the existence of things that have distinctive names of the elements appear to be mounting an attack on our understanding of sensible particulars because if we continue referring to them as “this” then the nature of the sensible particulars threatens to collapse. In this situation, we are left with the option of either accepting that what “this” is, after all, is something that is not generated and perishable, such as we imagine a tree or a mammoth is, or that the terms ‘fire,’ ‘water,’ etc. refer to something else than the particulars in the phenomenal world in the proper fashion. Archer-hind believes they refer to something else and gives to it the name of the “transitory attributes of space.”

As I see it, the main problem with this interpretation is that it breaks apart the continual coming to be and passing away of the elements which Plato discusses into a succession of discrete appearances of “fiery” and so on. It allows “fiery” qua a transitory attribute of space to exist separately from things that are fiery in the phenomenal world which goes against the logic of the cycle of changed described by Plato. The whole point of this-such passage is the opposite of what Archer-Hind takes it to be, because the reason why Plato wants us to recognize that the word “this” is a mismatch for πυρ or any other of the elements
is that a proper way of referring to them all, as “what is altogether such,” ignores what something that is hot or cold, or any other of the opposites is specifically.

As I have mentioned in the previous Chapter, fieriness “which we always see coming to be somewhere at one time and somewhere else at another time” (49D6) should not be taken on any occasion as being indicated by a special term that is proper only to a single thing, e.g., fire, but rather “by the demonstrative nature of τοιοῦτον, which refers us to our experience” (D. Miller 2003: 84). But if by “such,” as Archer-Hind claims, Plato really means an imperceptible (metaphysical) difference that subordinates the qualia (the precise term that Archer-Hind uses is ὁμοιωματα) from which distinctive names of the elements derive under the sign of a “transitory attribute” that helps us to identify what a specific affection attending some region of space is, then what explains a changing state of affairs that is proper to the referent of “such?” Why does it appear to us that the elements ’pass on coming-to-be to each other in a circular manner?’ We can no longer account for it with the phenomenal flux which characterizes in a particular state of affairs in which dissolution and coagulation of the elements is wont to happen, because Archer-Hind canceled out this option at the outset, choosing instead to take the distinctive names of the elements to apply to the transitory attributes of space. So we are left with the only alternative that what is “such” on each occasion is the time before the expulsion of phenomena contrary to the nature of ὁμοιωματα out of its immediate vicinity expires, which Plato stringently rejects with the univocal claim that fire, etc. ‘departs from itself as soon as we name it.’ Now let us step back a little to see why Archer-Hind’s interpretation is not going to work with the this-such passage.
To recapitulate, Plato wants to show that an expression such as “this is fire” is deficient because it betrays the fact that upon closer inspection fire turns out to be a kind of thing that as a whole is perpetually in the state of elemental inter-transformation even as it is coming into being. Now Archer-Hind thinks that what is going on here is that the elements represent the transitory attributes because of which different regions of space oscillate between being inflamed at one time, moistened at another, and so on such as we often see in the elemental interchange. Fundamentally, Archer-Hind’s analysis echoes Bassfreund’s 1885 study of the *Timaeus*. Bassfreund reads the τοῦτο — το τοιοῦτον distinction as making a sort of Aristotelian form-matter or substance-accident distinction where “matter” of τοῦτο is the substance of a thing, i.e. the “that which (sic!)” alone which is real which belongs to a thing,” and the “form” is the appearance, “which is something that is purely accidental, which has therefore no being of its own” (Für-sich-Sein)”80 (Bassfreund 1885: 52). But, going back to Archer-Hind, as it bears emphasizing, the determination of phenomena in time and therefore limited import of the properties of the referent of τοιοῦτον for the nature of the proper referent of τοῦτο is merely a distraction that puts out of sight the real difficulty into which we run when we casually start treating fire, water, etc. as “letters” of the universe.

Plato argues that we commit some sort of impermissible fault by obfuscating that the elements continually “go round” or “course around,” as it were, because the fact that all of them do have a generation deprives the elements of the right to be taken as severally distinct and self-standing entities that there

80 See Chalcidius, along the same lines: “Semper enim et sine intermissione ullius temporis fluunt haec quattor corpora, priusque ex conversione mutantur quam errunt cognominata, more torrentis inrefrenabili quodam inpetu proruentis” (§325 [349.17-20]).
exist by themselves. That is, whatever is seen to be fiery by us for so and so in each and every case is literally the radically other from a thing with unchanging and permanent identities, since it is subject to the process of circular coming-to-be, as Plato claims.\textsuperscript{81} He believes that by their nature elements, rather than being something like “letters,” to continue with the analogy, qualify better as more complex linguistic units such as syllables or even words and whole sentences, for

\textsuperscript{81} Now we start seeing how it so that, as Timaeus said (49A), the $\lambda\varphi\mu\omicron\alpha\sigma\varsigma$ ‘seems to force’ to reveal there exists the Third kind. As I have argued in the previous Chapter, in so far as the break with the previous twofold is concerned, $\lambda\omicron\varphi\omicron\alpha\omicron$ is the touchstone. For when it touches, or attempts to touch, fire and the others, they take flight, making manifest their inconstancy and formlessness, as opposed to selfsameness and determinacy of the paradigmatic being. I think John Sallis does a great job in explaining that the way in which fire and the other three take flight is utterly unthinkable within the framework of a paradigm and a product made to look like the paradigm that is linked to $\pi\omicron\iota\eta\varsigma$ [poësis]. For that reason, it is important to keep apart a special case of the circular coming-to-be that undermines our ordinary use of language and the cycle of generation and perishing in general. So, Sallis says: “A couch, however imperfect it may be as compared with the utter selfsameness of its paradigm, does not go untouched by its name and does not turn — is not turning at every moment — into some quite different artifact. And however it may be with the stone of a temple, crumbling into grains of sand that in turn are dissolved and washed away by rainwater, the temple will also typically undergo another, quite different kind of transformation, linked, not to the cycle of fire, air, water, and earth, but to the schema of $\pi\omicron\iota\eta\varsigma$; it will be rebuilt, for instance, as a Christian sanctuary or perhaps as a storage depot for explosives, which, when accidentally detonated, will damage it severely, though not to the point of making it unrecognizable as still a temple, or rather, as the ruins of a temple, now to be preserved as such. Such reconstruction (and, though differently, destruction) is situated within the schema of $\pi\omicron\iota\eta\varsigma$ and its twofold distinction. One needs, then, to mark the difference between artifacts, which are fabricated and can be refabricated within the framework of the twofold distinction between a paradigm and things made in the image of the paradigm, and fire, air, water, and earth, as they are spoken of in the stammering discourse of the present passage” (Sallis 1990: 105-106). He concludes this part of analysis by saying that “It is imperative, then, not to generalize the discourse on (the flight of) fire and the others into a theory of visible things as such in which one would declare all such things incapable of any more than minimal denomination, including, not insignificantly, all those things of the cosmos that have been named in Timaeus’ first discourse, operating, as it did, within the schema of $\pi\omicron\iota\eta\varsigma$. Indeed... Timaeus will say that each thing of this kind (the second kind) not only is like its paradigm but also has the same name as the paradigm (see 52A). Only fire, air, water, and earth, as they were before the generation of the heaven, as they were when they were not yet even quite themselves — only they are fugitives from $\lambda\omicron\varphi\omicron\alpha\omicron$. And it is precisely their flight that points to a third kind that would harbor them outside the twofold. One could say even that the very flight of fire and the others traces a way beyond the twofold, that these traces (as Timaeus will soon call them) mark a passage toward the receptacle in which they would be held, nurtured, sheltered” (Ibid.).
which reason he deems it unwise to attribute to the observed elements the status of the ultimate constituents of the universe.

Thus, in *this-such* passage, “Plato is not concerned with the “phenomenal fire” but the element fire that we observe” (D. Miller 2003: 91) because there appear to be something more fundamental on which the existence of each and every one of elements in the world must need depend. By the same token, the target of *this-such* passage is not to fill out the gap and to introduce a new piece of technical terminology for denomination of the elements or phenomena, but rather to “pry us away from… the use of words that seem to make what we experience, with respect to the elements, into distinct and self-standing entities” (D. Miller 2003: 84). Moreover, if Plato’s subject here is really the phenomena, rather than the elements, then he should not have said in the first place (see 49B1) that it was necessary to start with “a preliminary puzzle about fire and the other elements” but “about what we perceive.”

Beyond his emphasis on the fact that he describes merely how we observe the elements to change, “Plato says nothing to imply that his subject is really the nature of phenomena” (D. Miller 2003: 80). It is not being asked whether or not occurrences of phenomenal fire are species of the genus of fire. Archer-Hind makes Plato say in his translation of the passage. Instead, I will argue, the question is raised as to the nature of the elements, whose observable counterparts “go round” non-stop. For that reason, I think Archer-Hind’s translation and interpretation miss the point. Furthermore, “the actual “phenomena” about which Plato is speaking here are not described as “recurrent” in the sense of appearing to be the same” (D. Miller 2003: 81). Quite the contrary, Plato says that “each one of these <elements> *never* appears to be the same” (49C7-D1). It is perhaps with
reason that Cherniss therefore argues that “phenomena cannot be denominated because no part of the phenomenal flux is distinguishable from any other” (Cherniss 1954: 128). As Miller observes, ‘qua phenomena, this may be true of Plato. The impossibility that το τοιούτον…ὁμοίων (49E3-7) refers either to phenomena or to actual elements led Cherniss to posit the existence of a fourth category of things, “self-identical characteristics…omoion then is better seen as an accusative of manner’ (D. Miller 2003: 81).

§33. Denomination of phenomena.

A second ago I have mentioned the 49C7-D1 passage where Plato tells us that as they “go round,” the elements “circulate” similarly. Note that Plato really means “similarly” here and not “the same,” because the cycle of change he has described allows for variation. At the outset of this-such passage, the evidence of elemental interchange he presents suggests that the elements turn into one another in a sequence. Thus, he shows that a complete circle will swap all the phenomena and change their places in the chain of transmutation one by one and get back to where it started. Marked by the character of blind necessity for its automatic machinations, phenomenal flux is unstopping. That is, it goes on continually without a projectable end internal to it.

However, this alone does not guarantee that in reality the transformations are being repeated in exactly the same sequence that Plato has described at the beginning of this-such passage, or that you always can get a desirable change if you apply one element to another in that order. Plato recognizes that it is possible that some substance in the liquid aggregate state of matter will fail to condense to produce stones, as we always see water to be doing, for example, even if it looks like water to us. So all our denominations of phenomena, if not arbitrary, are too
vague to yield an accurate description of what changed into what as the elements
“course around similarly.” In any case, the point is that there are many sub-classes
of the elements each of which will not react to one of the other four kinds of
elements, when any one sort of them enters into physical contact with it, always
the same. This merely serves to reflect the fact that, as I have pointed out in the
previous chapter, just as the geometric shapes of the four kinds of Platonic solids
so the absolutely “pure” elements of fire, etc., rather than being the ordinary
objects of our experience, serve as theoretical posits. (Pure here can only mean the
quality of the constituent triangles and, hence, smoothness of the edges of the
faces of the primary bodies, for instance.) As Timaeus explains later:

[W]e should note that there are many varieties of fire that have
come to be. For example, there is both flame and the effluence from
flame which, while it doesn’t burn, gives light to the eyes. And then
there is the residue of flame which is left in the embers when the flame
has gone out (58C-D).

Plato does not have in mind some particular cycle of transformation that
every round resurrects and puts to death a whole range of the elements an infinite
number of times, as if in a circle, but rather means a cycle in which they go
round as such. They never stop changing cyclically. The problem with changes
we observe the elements undergo that Plato seems to be at pains to describe here
is that there is only so much difference between the elements as to call ‘on each
occasion’ fire, etc. ‘that which we always see coming to be somewhere at one time
and somewhere else at another.’ As Plato claims, we cannot even point at
something and say definitively that “this is fire,” unless one is willing to put

82 “[T]he cycle he has described probably allows for variation: Plato’s cycle is water >
earth > air > fire > air > water > earth > [?], but a more complete cycle would have ended
with air > earth > water > earth > etc. It seems most likely that Plato’s point is that we
observer a cycle of change, not a particular cycle” (D. Miller 2003: 81).
oneself to shame by maintaining ‘about any sort of them that any one at all is this
and not the other,’ because ‘the element flees not waiting for the sentence.’ Is
Plato then telling us that the observed elements and the world made out of them
are in such a state of flux that we should never use any words to signify them,
even the ‘this?’

Plato stresses that that this-words are better used in conjunction with a
thing which always stays unchanged, such as the Receptacle. So Zeyl, for his
attribute interpretation of to toioúton, argues that Plato applies “nominal
references to phenomena as adjectival descriptions of some basic, permanent
subject worthy of that status. This subject is the receptacle, for only it can be
designated as τούτο” (Zeyl 1975: 149). However, one need not stop at taking as
the referent of to toioúton the attributes of the Receptacle (a separate argument
must be made to the effect of that, but I will not discuss here) and go even further
and argue that Plato wants to exhibit the terms ‘fire,’ ‘water,’ etc. as logically
adjectival in character because they are “improper names” of phenomena par
excellence (see Cherniss, 1954).

By this understanding, the true meaning of the phrase ‘fire flees as soon as
we name it’ is that the flux in the actual world is so radical as to invalidate all our
references to sense-objects as null and void. So Gill argued that the Receptacle,
ultimately, “cannot provide the phenomena with such permanence as to licence
our calling them anything at all” (Gill 1987: 47). In her 1987 article, she rejects
Zeyl’s attribute interpretation of to toioúton. Instead, she hypothesizes that Plato
indeed lists the things we see as being fiery “somewhere at one time and
somewhere else at another time” as the items of the radical, Heraclitean flux. She
shows that if we take the elemental inter-transformation to be a token of
Heraclitean flux then nothing at all can be said of the proper referent of τούτο, “except perhaps “not even such” used in an indefinite way” (Gill 1987: 34) to speak about phenomena. This, at least, seems to be the characterization that the unmitigated flux, associated with the Heraclitean position, receives from Plato’s hands in Th. 179C-183C: give up trying to say what is a thing that is some such or other, for there is literally nothing stable to call by its name.83 As Cherniss puts it, it is precisely to find the way out the predicament in which we are apparently caught whenever we try to express such distinctions that Plato introduces the “self-identical characteristics” which “recur.” Again, Cherniss treats the phenomenal flux observable in the elemental inter-transformation as radical at which point “the intensity and limits of the apparent affections of the Receptacle are continually changing and so are indeterminate as fire, water, or anything else” (Cherniss).

If Cherniss's and Gill’s interpretive moves stand uncorrected and the items Plato lists at 49B7-C7 are subject to radical and radical (Heraclitean) flux then it appears that “the physical world is in itself unintelligible. And it is not merely that we should not but that we cannot refer to physical objects. All our attempted references pick out determinate characteristics instead” (Gill 1987: 40). I will argue against the view that Plato’s talk of the flux implies that it is impossible to denominate phenomena later. For now, let me just show what argument can be made to the effect that the denomination of phenomena is possible.

83 See Sedley: “given the kinds of change that must be perpetually going on [on Heraclitean flux thesis], what can we succeed in saying about anything? The answer turns out to be ‘Nothing,’ because the object of your discourse will be vanishing before you can get the words out… there is literally nothing stable” (Sedley, David. "The Collapse of Language? Theaetetus 179C-183C." N.p., n.d. Web. 25 Jan. 2017. Url:=[https://www3.nd.edu/~plato/plato3issue/sedley1.htm]).
So Plato constructs the elements as generated and perishable “simple” bodies that have a certain structure. Because of their microscopic size they are invisible to the eye. In spite of that, they are physical things and behave like the rest of the sense-objects which are seen to be constantly in the process of change and moving. Plato does seem to acknowledge that on the physical level some changes occur more quickly than the others, as a result of which “what we observe to take place over an extended period of time may happen to a small group of elemental bodies much more quickly” (D. Miller 2003: 77). For example, Plato argues that aging of the body is by far a more time-consuming process than the loss of elemental particles which causes it. Interestingly enough, Sextus (M. 8.7 [105]) noted long ago that Plato thought that bodies are, fundamentally, never the same because of how quickly their constituent elements change: “Plato <said that only the intelligibles are true> because the sensibles are always coming to be and never are, since substance (ousias) flows like a river [cf. Tim. 45A7], so much so that the same thing does not persist the same over two smallest periods of time and cannot be pointed at twice because of the speed of the flow” (cf. Phd. 87D9-E1, Smp. 207D6-E1).

For Sextus, even if the thing looks the same, Plato will not allow it to be so in deed because its substance changes so much that at any given time it is different from what it was and throughout the entire duration of its existence is continually coming to be something else. How would Plato account for this speed of change? Miller argues that Plato thought that the speed of change increases proportionately to increase of the rate of the mobility of body. Under normal conditions, the smaller the body the faster it can move because it encounters less resistance from other bodies in the plenum surrounding it. For that reason, Plato says “that
which has the fewest faces must necessarily be the most mobile (56A6-7).” Accordingly, the pyramidal fire particle, which is composed from the smaller number of constituent triangles compared with other elemental bodies, moves faster than the rest of the elemental bodies.

Therefore, the elemental particles will be susceptible to the quickest changes. For that reason, “elemental change, Plato thinks, exhibits radical change” (D. Miller 2003: 74) because change in structure of any one of the elements “causes it to become something else, namely, a different elemental body” (Ibid.). Moreover, even if change affecting an aggregation of the elemental bodies that we are pointing to at the moment appears not to be fast on the macro-level, Plato thinks that “the change is as he describes none the less. So when Plato claims that we observe elemental change on the macro-level to be fast and constant he may mean that we could observe this, if we had the means, because that is really what is occurring” (D. Miller 2003: 77). Thus, no matter how big the quantity of the materials in the place that we see is being occupied by a mass of elemental bodies, we should not refer to fire, etc. as “this,” because it “describes a thing as being an entity in its own right, a permanent subject which, while possibly undergoing various modifications, yet retains its identity” (Zeyl 1975: 146).

It appears to be that because the change of the elements is fast it is risky to apply a name as reference to a complex of particles because their arrangement may have already altered on the fundamental level. Plato’s reply could be something like this. Just to reiterate, he argues that that “the fact of constant change causes a difficulty in how to speak accurately about the elements” (d. Miller 2003: 75) warrants a suspension of the identification of what is ordinarily called fire, etc. with the “letters.” Now because he poses the difficulty presented
by an elemental change as one of language, scholars have often expressed the opinions that the main worry of Plato in this-such passage is discussion of the proper use of language. For Cherniss, 1954 as I have pointed, all references to phenomena of a kind “this is…” are meaningless and vague. Taylor, 1928 and Cornford, 1935 suggest that Plato gives insists on words “fire,” etc. being used in a new reference. Hackforth, 1944, 36-37 suggests that “the purpose of the whole context is not to correct our ordinary reference of the terms, fire, air, etc…” Zeyl, 1975 suggests that Plato wishes to defend our nominal references to phenomena. I concur with Miller who suggests that “Plato is not recommending that we change or even keep our habits of speech but that we recognize something about the nature of fire” (D. Miller 2003: 75).

Plato wants to make us recognize that fire, water, etc. are best referred to as “such” because, he hopes, then we will have a better understanding of the nature of that third kind thing that is said to be “that in which” the elements appear to be, namely, the Receptacle. It is a necessary factor of the elemental coming-to-be and can function as the proper referent of the “this” when we try to say which is which apropos the elements. The short answer is that we invoke something which beyond the things which undergo the process of change such as we observe in the elemental inter-transformation and which serves as the true referent of “this” when we say, for instance, “this is water.” It is not that our references to the elements invalidate the patterns in language, therefore, but that we fail to grasp the entity that is being designated by the nominal reference in this case as such. This “leaves us (sic) thisness as distinguishing marker” (D. Miller 2003: 84) for denomination of phenomena. However, unlike τούτο, “the thisness of το τοιούτον
refers to a particular changing state of affairs, not to a thing that has a changing identity” (Ibid.).

Again, Plato claims ‘fire departs from itself as soon as we name it.’ As I have just shown, this fact serves to point out to us that there has to be something else that somehow provides for generation of fire, water, etc. In that sense, since the existence of the Receptacle fulfils some necessary requirements for the coming-to-be of the materials out of which all other bodies are constituted, in accordance with this logic, therefore it also serves a necessary factor of the coming-to-be of body in general. This causes Plato’s account of the Receptacle to vacillate between considering its role in elemental coming to be and the coming to be of bodies as derived from the elements. When we say that body comes to be in the Receptacle it does not imply that, for instance, chairs come to be in the Receptacle, but rather that elemental constituents that compose these chairs come to be in the Receptacle. Nevertheless, because all other bodies equally derive from the elemental particles, body in general “can be said to have causal dependence on the Receptacle — “causal” in a sense of “that without which not” for the elements” (D. Miller 2003: 73). For that reason, we can speak of the Receptacle as “that in which” body in general comes to be. Furthermore, it can be said to be “that which receives” the coming-to-be of body as well as “that without which” body could “not” come to be in general. On this account, the Receptacle is kind of thing that is also part of the physical world. For it “grounds” coming-to-be of bits of the bodily stuff with result being that the world as a whole “is not a state

84 See note 84. Cf. Miller: “When we witness a change in ordinary, perceptible bodies we can generally distinguish between a change and what undergoes that change. For example, we recognize that it is Socrates who was young but is now old. Accordingly we say, “Socrates is growing old…” Other things [besides the elements] do indeed change constantly, in the sense of gaining and losing constituent particles, but not cyclically; also they are not simples but composites, composed of the elements” (D. Miller 2003: 74).
of phenomenal flux but one of regularly changing bodies having determinate properties” (D. Miller 2003: 88).

The decisive evidence against the theory that Plato has in mind Heraclitean flux in the *this-such* passage is supplied by the text itself. It turns out that later Plato denies that all elements in nature are interchangeable. The geometric construction of the elemental body of the earth places it outside of the cycle of elemental transformation. As I have indicated in Chapter I, because of its singular construction out of right-angle isosceles triangles earth is exempt from the change described in 49B7-C7. So, “What was said beforehand must now be more clearly declared. For all the four kinds <of elemental bodies> seemed to have coming-to-be through each other into each other, not rightly appearing so” (54B5-8). This amounts to saying that there is in Plato neither incentive nor a good argument to deny the possibility of referring to sense-objects. Nevertheless, I would to like to dwell for a little longer on what Cherniss’s interpretation bases itself broadly.

As I have pointed out, Cherniss picks up the parallel between *omoion* and “circular” elemental coming-to-be and proposes a translation in which *omoion* acts as an accusative of manner modifying *toioûton* that he assumes denotes the “self-identical characteristics” which “recur.” First of all, as Gill justly observes, “Cherniss has often been criticized for introducing a fourth realm of items, the reality of distinct and self-identical characteristics — in addition to the Forms, the phenomena, and the receptacle” (Gill 1987: 41). This is true of Cherniss, but the tradition he inspired produced some thoughtful interpretations\textsuperscript{85} that avoid this problem, but which I am not going to discuss here. Thus, in what follows, I limit

\textsuperscript{85} Most recently, Silverman, 1992.
myself only to the analysis of Cherniss’s version of the alternative reading of this-
such passage.

§34. Phenomenal Flux.

Most commentators have paid close attention to the parallel between πῦρ
and āπαν in the original text. Lee, Mills, Reed, Mohr, and Silverman follow
Cherniss’s interpretation who sees that reference to be only to the self-identical
characteristics or characters, which recur86 (Lee identifies them with the “images
of the Forms”). Zeyl, on the other hand, argues that toioúton describes “the
receptacle that is qualified by such-and-such a recurrent attribute,” or “that subject
that is such-and-such.” He thinks that the primary goal of the ‘puzzle about fire
and things that come to be with it’ is to get around the difficulty posed by
pressures of the phenomenal flux to indicating phenomena in speech. Apropos
49E3-7, Zeyl remarks that “the reference of the χαὶ āπαν clause, then, is
unmistakably to phenomena. Thus, either the parallel with πῦρ must be given up
(an impossibility) or it must be recognized that πῦρ itself refers to phenomenal
fire” (Zeyl 1975: 141). For that reason, he claims that “Each and every
phenomenal thing is something which recurrently turns up similar to what it has
been on a prior occasion and to what it will be again on some later occasion as it
passes through the cosmic cycle again and again” (Ibid: 139). As Miller observes,

86 Cherniss claims that “This so many have overlooked simply because they have
misconstructed the τοῦτο in D2, D5, and D6 and consequently the ταῦτα in E4. When it is
seen that ταῦτα μὲν ἑκαστα μὴ λέγειν means “not to speak of these phenomenal phases as
severally distinct,” the very balance of the sentence, τὸ δὲ τοιοῦτον…οὕτω καλεῖν, “but
so to call the such and such…,” reveals the meaning necessarily to be that “severally
distinct,” ἑκαστα is properly predicated rather of the characteristic that is identical in each
and all of its recurrences; and in fact a few lines later (E8) ἑκαστα οὕτω is used of these
characteristics that are manifested in the medium [i.e., the Receptacle].”
“Zeyl’s chief argument against Cherniss and Lee is that there is no need to posit the existence of the self-identical characteristics because the phenomena can be “similar” and therefore can be denominated” (D. Miller 2003: 86). Let us unpack just what the meaning of the word “similar” as applied to phenomena in this case is supposed to be.

It is an empirical fact that in spite of undergoing continual change and being in the process coming to be something else all the time, some things look alike.\(^{87}\) This is only natural, considering that Plato himself explicitly states that when the world was created by the Demiurge, he put things in order. Thus, the phenomenal flux doesn't have the power to chase away the observed similarities from the processes busying the physical world. It is clear that the condition of flux is just what the notion of Necessity entails: a complex of causes that assist as a journeyman in God’s workshop. Think of it that way: unless there were Necessity in the world, in terms of what could the impact of the order on the behaviour of matter could possibly be cashed out?

Even what we call ‘brute facts’ of nature, one of the designations of Necessity, are merely the links of the great chain of Being that connects this world to the world of Forms. For that reason, the persuasion of Necessity by the Demiurge entails the beautifullness of the universe as much as the “evil” face of the resulting order (chance, accident, catastrophe, etc., etc., etc.). The divine intervention consists in moving the Necessity in the direction in which it can

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\(^{87}\) Cherniss is silent on this. He asserts that “the whole point of 49D3-E4… is that the proper reference for the terms “fire,” etc. is not the phenomenal flux of which men do erroneously try to assert them.” However, one could argue that the fact that phenomena are not severally distinct does not preclude them from being similar. They could be similar and different at the same time. Cherniss inscribes the phenomenal flux in the world as the watershed between phenomena that “exist for so and so” (Taylor) and the perpetually identical characteristics which recur.
“produce *those* effects that Intelligence intends” (D. Miller 2003: 69). In contrast, “Necessity in the disordered state… could not serve any end and would resist any employment, or “persuasion,” by Intelligence… Plato’s analogy is of course what a craftsman does” (Ibid.). Say, we hire a craftsman to build a fireplace. To construct it, to know how to do it is not enough. The craftsman must have “an access to materials that will remain stable while being heated by fire as, for instance, bricks” (D. Miller 2003: 68). If this necessary condition is satisfied then the bricks can be arranged by mortar in the desirable way to turn into a decent fireplace. This serves to illustrate that “the fact that the bricks will not exhibit other properties than those for which they are selected is essential to the building of the fireplace” (Ibid.).

Similarly, Necessity in the world is far from being the *nemesis* of life. When we blame the Necessity for the evils of this life, we think we blame the spiteful condition in which we are imprisoned in the body, while in reality the body is the source of the greatest pleasures in life that are not part of the daily routine of soul after death. Necessity does not restrict or inhibit the goal of organic nature in any way. We say the Necessity is “blind” to the *telos* of things, meaning that it never sleeps and gradually worms its way into our life, forcing us to bargain with its miserable appetite for destruction. But it also means that it is impartial and objective, never playing a double game with the Intelligence. It is always ready relinquish its hard line policies when it is courted by the Mind. Thus, it functions perfectly as an auxiliary cause of all the beneficial effects of the regular motions

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88 See note 55. Cf. Lennox, 1985, 210: “The necessary causes in the Timaeus are always the inherent necessities possessed by the materials at hand, used or persuaded by divine intelligence.”
of the soul. Though it is blind, it is not deaf, so to speak. It is receptive to persuasion by Intelligence and in the persuaded state continues to do its job in silence. According to this image, “Necessity could not tell itself what to do to contribute to the cosmos, but it ‘listened’ to Intelligence, and complied willingly and of itself” (Broadie 2012: 183).

Metaphorically speaking, Necessity regulates the frequency of vibrations of matter depending on the strength of the administered force. This proportion expresses the fixedness of properties (Necessity). “In the language of Phaedo (99B3)… [it is] “that without which not” for the accomplishment of the intentions of the craftsman” (D. Miller 2003: 68). For that reason, the observed similarities are not arbitrary facts or vagrancies of perception, but a part of the physical world just as much as change, though at a different level. The process of change is unstopping, whereas similarities are episodic. As a matter of fact, one cannot exist without the other in the phenomenal flux.

Necessity is a kind of system that has incredible capacity for circulating the impulse transmitted to it with practically zero loss of energy. “Such a system is affected from the beginning with a minimal disturbance that is existentially amplified” (Baudrillard 1980: 199) and accumulated in waves of parapraxises. Hence, another name of Necessity is the Wandering Cause. Although it

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89 As Miller, 2003, 68 wonderfully puts it, “Persuasion presumes that the persuader… has some end in view. Persuasion would then be applied to achieve this end. But if this end is to be achieved it must also be the case that the subject of persuasion be capable of being instrumental towards the end and be susceptible of persuasion. One cannot, for example, persuade an insect, or an irrational animal, but humans, granting that they are rational beings can be, persuaded.”

90 Cf. Cornford: “This word (necessity) . . . is now usually understood as denoting what is fixed, permanent, unalterable, knowable beforehand. In the Platonic Timaeus it means the very reverse: the indeterminate, the inconstant, the anomalous, that which can be neither understood nor predicted” (Cornford 2003: 172). Against Taylor, Cornford insists “that the body of the universe is not reduced by Plato to mere extension, but contains motions
cooperates with Reason, it inevitably creates difference at the ends of the poles at the same time as it drives things into a state of relative of equilibrium. In our speech, we neglect that the regular motion of the regularly shaped compounds of the elements is part and parcel of the always changing state of affairs in the world and hasten to the labels we put on things. Thus, we say “this is water” believing, wrongly, that water is anything that peradventure travelled far away from its natural site, but did not lose its roots, such as water in a drinking glass. So far, we have merely fleshed out the implicit premiss of Cherniss’s argument: the iterability of the expression “this is…” is made possible by the act of seeing similarities. The temptation to refer to fire, etc. as “this” is caused by the similarities observed in the masses of water, fire, earth, and air that have been fused together and pushed back into their “home regions” in the physical world by Necessity. Cornford even elevates this as a principle guiding his translation of τὸ τοιοῦτον…δῆμοιν, which he believes “refers to a fiery stuff of which there is *at all times* (i.e. at any given time) a certain amount that can be recognized and named” (in Cherniss 1954: 123). To put it differently, and here I take Cherniss’s interpretation word for word, we *think* that we can find virtually infinite amounts of fire, etc. in every corner of the world and, as a result, develop a habit of speaking about the observed elements as “this” or “that,” in effect projecting onto the condition of flux permanency that is not inherently in the nature of things we are talking about, not even once.⁹¹ So, Zeyl: “the flux poses a grave threat to our ordinary references to phenomena: since the water that filled my pond last spring

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⁹¹ Cf. Cherniss: “Taylor says it is (Commentary, p. 316) the “things which we mistakenly suppose to be permanent,” i.e. the ever-changing phenomena.”
has turned to air in the summer’s heat, what right did I have in calling it ‘water’ [rather than ‘air’] in the first place?’ (Zeyl 1975: 128).

Cherniss’s translation makes Plato say at once in the text *apropos* fire “we ever see coming to be in different places at different times” that it is actually *not* “some other of things we think we are designating as something when by a way of pointing we use the term ‘this’ or ‘that.’” Now fire that we *can* see and the rest of the observed elements which give rise to one another, as if though in the cycle, are just among these things. Clearly, then, the suggestion is that the distinctive names apply to something other than all or just several phenomenal occurrences.⁹² Thus, he attributes to Plato saying that there is nothing that could be singled out by the word “this” that would be the same “whenever anything is seen happening now here and again there” such as fire and the other three. “This” applies to the Receptacle, and the indeterminate affections by which it is overflowed are too impermanent, because of the phenomenal flux, to tell us anything about its true nature. Accordingly, Cherniss claims: “the injunction… is ‘not to call this transient phenomenon fire or water’” (Cherniss 1945: 116). Thus, at the bottom all our attempts at the denomination of phenomena are a failure, because there is not a single visible thing that would adequately stand the sentence of being fire or water. Instead, we should call fire “the such and such, whatever the correct formula may be, that is always identical in all of its occurrences” and “always recurring alike,” also known as the perpetually self-identical characteristics “severally the same wherever they recur” and “severally distinct.” So, Cherniss:

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⁹² See Cherniss, 1945, 123 on 49E7: “Most interpreters translate by “constantly,” “perpetually,” “at all times;” but some of them clearly seek to give this a distributive or aggregative implication which approximates the interpretation of Eva Sachs, who baldly translates το τοιούτον in E5 by “Aggregatzustand” and τὸ διὰ παντός in E6 by “in seiner Gesamterscheinung.”
The only factors in generation that can properly be called by the distinct names, “fire,” “air,” “water,” etc. are the characteristics which being perpetually identical are severally distinct, not the unstable manifestations in phenomenal flux that cannot be clearly distinguished from one another” (Chernis 1945: 124)

It is beyond the scope of the current thesis to either disprove or defend Cherniss’s interpretation. I have brought it up merely to make clear my position on some of the most contested statements made by Plato in this-such passage. For a moment, let us examine what evidence there is in support of or against the alternative reading advocated by Cherniss. Although I personally do not have a formed opinion about which reading is closer to the original, from what I said it perhaps follows that I sympathize with the traditional reading the most. This is a result of my deliberate choice to weigh in some of the most diverse arguments presented by both sides in the debates on the meaning of the phrase αει περίφερόµενον ὅµοιον and not skew my interpretation to any side.

As I have shown, Cherniss's reading has a relative advantage over other interpretations because it puts on the one side recurrent self-identical characteristics and transient and indeterminable affections on the other. In Lee’s interpretation, these classes of things correspond to “the recurring, invariant character we apprehend perceptually in phenomena of the same sort” and “an individual occurrence of that recurrent character” (Lee 1966: 367), respectively. Cherniss separates out the self-identical characteristics which “recur” from the physical world and extracts the distinctive names of the elements from the phases of phenomenal flux with which they are “naively and improperly identified,” resulting in the transmission of the observed properties instead of the elements to these characteristics themselves.
Consider if this view is open to the argument I levelled against Archer-Hind’s interpretation. I claimed that the latter removes the accent of the preliminary puzzle from the main theme of *this-such* passage, which Plato declared to be a critique of the element-letter simile. Plato warns us against the illusion that the elemental particles are on a level of the “letters” of the universe, as we implicitly assume in our ordinary ways of using language. Now by introducing the fourth category of items Cherniss accommodates in his interpretation of *this-such* passage as a whole a claim that the terms ‘fire,’ ‘water,’ etc. are more ambiguous than we commonly think because in reality they refer to phase of the phenomenal flux. However, it plays down the contribution of the Receptacle to “grounding” of the circular coming-to-be with the effect of giving raise to the similarities observed by us in the phenomenal world. The invariant characters *qua* recurring need not be dependent upon the Receptacle for their existence. The Receptacle merely acts as a medium in which they are “ever and anon being manifested,” but it has no part to play in coming to be of the invariant characters as such. Though they always enter in and exit out of the Receptacle, these characteristics exist *simuliciter*.

The problem I find with this view is that by assigning the properties of which we become aware to self-identical characteristics is that Cherniss, in effect, attributes to Plato saying that the world is a state of the phenomenal flux. Because of this, reference to sense-objects becomes deeply problematic. It suggests that “we should never employ any words to signify the elements” (D. Miller 2003: 87). Cherniss’s argument entails that the problem posed by the transmutation of the elements is “not that we cannot determine a Form of F-ness to which the observed sensible properties correspond but that we cannot determine what it is that has
these properties because there seems to be a changing state of affairs” (Ibid.). But this cannot be right.

We should be seriously wary of the implications of Cherniss's interpretation for what is expressed in terms ‘fire,’ ‘water,’ and so on. Fundamentally, assertions “fire is the such-and-such” and “there is fire” are two separate claims that Cherniss wants to pack in one by saying that the characters recur. But what does it mean to say that fire exists because self-identical characteristics exist anyway? Have we made any real progress in the explanation of the nature of the elements compared to relying on the observed similarities? Finally, what makes this explanation of the cyclic coming-to-be of the element any more “likely” that the one which holds that each element always continues present with its own unchanging nature? Apparently, positing of the fourth category of items, which recur, came at the price of making the observed similarities in the phenomenal world collapse into the indistinguishable phases of flux. And this suggests that all things appear the same to the eye, with the sole exception of the severally distinct characteristics. Cherniss has no better account of how we can say about the elements that continually go round which is which other than to say that there are these characteristics.

I will argue that this is simply not true of Plato. I am inclined to believe, and here I follow Miller, that Plato is not trying to make references to sense-object an impossibility. There is no point in the text at which he denies us the ability to tell the difference between the properties of the elements with the help of our senses alone. For we do point to the observed elements and say “this (τούτο) very thing.” When Plato recommends we speak of the elements as what is “such” he does not suggest that we should refer to each of the elements in precisely the same
way as Cherniss’s interpretation entails. Speaking thus we can express the
difference between fire and the rest of the elements, which is conveyed precisely
by the demonstrative nature of the pronoun τοιοῦτον. Even though all things are
equally a changing state of affairs, “what we are referring to at this instant is a
particular stage or phase of the change to which we are now pointing” (D. Miller
2003: 84). And we know exactly to what we are pointing. It is just that the
expressions we use prove to be too loose for that matter.

To conclude the analysis, I think that Cherniss makes an unsubstantiated
claim when he subscribes Plato’s talk of the phenomenal flux to a Heraclitean
position. It appears redundant as soon as we realize that switching from “this” to
“such” does not require that we start calling fire something else than what it is
commonly thought it refers to because we already that. So, Miller: “The
Heraclitean view is certainly not Plato’s” (Ibid.). As I have shown above, Plato’s
main goal in this-such passage is to make us recognize something that is inherent
in the nature of the four materials that the naturalists misrepresent as the elemental
“letters” of the universe as they continually go round. By this understanding, the
problem that is raised by the preliminary puzzle is as Miller describes:

The problem is that we fail to understand fully what our words refer to. Plato, as usual, says that the statement, “This is water,” is more
accurately stated as, “This comes to be water.” This corresponds to the
formula “x comes to be F.” With the aid of the puzzle Plato is trying to
point out that what appears to us to be water corresponds to “x coming
to be F,” while the “x” has somehow escaped our notice. Our
statement “This comes to be water” is accurate, but we may fail to
understand that this (the demonstrative pronoun) does not refer to
what we see, to what appears to us, but rather to “that in which” the
process of coming-to-be occurs, the Receptacle (D. Miller 2003: 78).

I hope the comments for the cited passage are unneeded because it strikes
a chord with anyone who has been following my argument. I will now say a final
word about the passage we have been considering and offer some concluding
thoughts. Maybe I will repeat myself, but I will attempt to synthesize different points that came across in the course of this Chapter in a concise and succinct fashion. So, just what are we to make of this dazzling and sometimes frustrating piece of analysis in Plato’s *Timaeus*? First of all, let us get out of our heads the notion that Plato is trying to introduce a piece of technical terminology in any sense. As much as I have looked for it, it is nowhere to be found. But the good news is that we can do without it just as well. From my perspective, the *this-such* passage is about the four kinds as such, as they appear to us, but *only* as they appear to us. It is about the observed elemental interchange that does not need any special introduction. Now Plato would have it that, if we pay close attention to it, the cycle of change in which we can see the elements revolving is paradoxical and puzzling.

As anybody can tell, Plato believes it is the one that is most bountiful with thoroughgoing implications because it is the one in which none of these four “appears ever to remain the same.” Plato emphasizes that for the short duration of time that it exists, fire as well as any other element is *always already* turning into another element by their very nature. The nature of the elements is such that their collective existence is inextricable from the circular coming-to-be in which we see them “go round” continually even as they appear to us to be distinct and self-standing entities. However, Plato greatly-upsets the picture of the world in which we thought everything is explicable in terms of being either water or air, fire or earth, and so forth because what we took to be the elemental “letters” start receding into the syllables, phrases, and whole sentences right before our eyes. And as the former “letters” do that it becomes less and less possible to make sense of referring to the elements as “this” or “that” because, as Plato’s analysis shows,
what in every case we are designating in this way is last of all a good match for a permanent and stable something that actually and not just apparently undergoes all the changes that we see the elements undergo — the Receptacle. For if we knew that it is really the Receptacle that serves as the proper referent of “this” then, Plato thinks, we would refer to the observed elements as “such,” and, moreover, stop viewing them as the first principles of everything.⁹³

⁹³ A lesson that it teaches us is this: “do not imagine that you reach the primary principles of reality by reducing the corporeal materials to their constituents (by contrast, Democritus not only reduced fire to spherical particles, but postulated such particles as literally indivisible atoms, and so, with the void, as ultimate constituents of reality)” (Broadie 2012: 184).
Chapter VII. The Third Kind in Plato’s *Timaeus*

So far, we have only have only had a chance of catching a glimpse of the Receptacle, a concept notorious for its unintelligibility on both Plato’s and the commentators’ accounts. Nevertheless, much has been said to a point that the Receptacle is not to be overlooked. Therefore, let us sum up what we have learned about it on the preceding pages. Plato states that the Receptacle is something more fundamental *in which* fire, water, etc. come to be and so exist through entering in and exiting out of it. This rather controversial view, to say the least, has pulled him into polemics with apparently some unnamed Pre-Socratic, naturalist, and materialist teachings which viewed fire, water, air, and earth as distinct and self-standing entities which store different “inclinations” of matter soliciting all the phenomena in the world. These things, which he says they identify with the elemental “letters” of the universe, four in kind and number, being by definition soulless and therefore devoid of intelligence on Plato’s account, do not pass for the absolutely first principles of everything, as it was commonly thought, but rather qualify as that which is coming into being at all times. “[T]hey shouldn’t even be compared to syllables,” he says, “only a very unenlightened person might be expected to make such a comparison” (49D9-C2).

According to a traditional picture, however, these mighty and pervasive beings have engendered on their own the all sorts of mortal creatures dwell in their natural habitats of land, water, and air here on earth. There is no denying that the behaviour of organic species of life is very different in the basic principles of operation from the corporeal elements and their “powers,” but through and through they seem “to be rooted in them, feed off them, to live and move and have
their being in them” (Broadie). After all, the individuals inherit from them functional structures of organic nature reproducible in many different materials which allow them to secure their physical survival. Why can it not be true, then, that there is some elemental creativity through which animals and plants originally emerged, and emerged having just the physical equipment they needed in order to make their way in their environment?\(^{94}\)

Plato defends his thesis by making us accept that the distinctive names of the elements and the meaning of words “this” and “that” cause a confusion about what in fact we are referring to when we use the expression “this is fire,” for instance. There seems to be a problem in saying it, because when we attempt to distinguish exactly which one of the elements we see “whenever anything is seen happening now here and again there” (49D5) coming to be e.g. fiery we give the distinctive names to something that, nonetheless, at all times “gets away without abiding the charge of “that” and “this,” or any other expression that indicts (sic!) them\(^ {95}\) of being stable” (49E3-4). To this end, Plato has described a cycle of change of the elements where they apparently “transmit their coming-to-be to one another” (49C7). Now let us ask ourselves, why does Plato assert as a part of his

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\(^{94}\) As a matter of fact, “Plato may consider his audience less ready to accept that the elemental materials and forces are wholly devoid of intelligence, including even what might be thought of as a purely intuitive, inarticulate, quasi-intelligence tendency… if the audience is allowed to stay with the commonsense assumption that the eyes are above all for seeing things on our own level. It is this — seeing the cliff-edge in front of us, or the predator before it sees us — that matters for physical survival. So perhaps it is in contrast to this sort of view that Plato insists [47A-C] that that the mortal faculty of vision is principally designed” (Broadin 2012: 173-181) to let us observe and learn from the regular revolutions of celestial bodies how to order our life accordingly so as to forward our incorporeal and immortal reason’s self-salvation in the afterlife.

\(^{95}\) See Cherniss, 1954, 118: “The plurals, μονήμα ὧς ὄντα αὐτὰ (E3-4) are at first sight strange after the singular subject of φεύγει ὑπὸ ὑπομένον (E2), to which αὐτὰ should refer.” According to Cherniss, “Plato, just because he has said that “it,” the phenomenon, does not abide, immediately and without further explanation refers not to “it” as a single thing but to “them,” the multiple and transient phases of the phenomenal flux that cannot be identified as distinct objects” (Ibid).
argument in *this-such* passage that our ordinary use of the words ‘fire,’ ‘water,’ etc. have to look foolish because had we known of their nature we would not refer to them as “this,” but “such”? This would be true only in case there were a rule built into it saying that if such a noun applies, it applies for ever, but anyhow this is *not* the case as far as we know. “Plato simply insists on it by dramatically pressing the claim” (Broadie 2012: 188) that the observable elemental interchange makes nonsense of our use of the terms ‘fire,’ ‘water.’ etc. as nouns.

What is the case, however, is that the critique of our problematizing the elemental interchange in the world in this peculiar linguistic way in *this-such* passage actually serves as a platform to advance the cosmology beyond the two kinds mentioned at the beginning of Timaeus’s discourse. As we know, in the course of the Receptacle-passage Plato is going to drive home an argument that the each and every one of the elements is made to cling to existence, on pain of being nothing at all, for even that upon which it has come to be is not properly its own (52C). Plato signals what will be the main target of his discussion of Necessity in conjunction with the Third kind in the Receptacle-passage when he tells us at 48B5-7 that he is going to break off the discourse on cosmic production in order “to study the intrinsic nature of fire, water, air and earth *prior to the heaven’s coming to be*, as well as the properties they had then” (i.m.) (48B5-7).

With his words, Plato puts on the radar a discourse which is to address the impasse of *logos* reached by cosmology in the treatment of how these four kinds came to be. It marks the difference between “images,” which can be moulded and remoulded without going outside of the framework of the twofold distinction between a paradigm and a product made to look like the paradigm, *and* fire, air, water, and earth, as they are spoken of in the coming discourse. Indeed, when
logos tries to touch any one of them, they elude it, take flight and retreat from it, making manifest their formlessness and lack of self-determinacy in a way that is unthinkable within the schema of cosmo-poiesis. Because the elements turn into one another (B7-C7) it appears to be impossible to say “about any sort of them that any one at all is this and not the other” in such a way as to make use of a reliable and stable logos. So, in order to say something different from words which Timaeus could by “virtue of likely accounts” afford himself to say about fire, etc. in his story before, now requires that they be immersed in the discourse on what is the safest and not merely the possible way in which to call each of them in every case.

As the last two Chapters have shown, Plato gets around this difficulty by exhibiting f ours kind of elements as essentially qualifications, the terms for them being logically adjectival. It is only natural that once everything has been said and done then Plato makes our understanding of the nature of the elements more nuanced by introducing our picture of the world complete a subject which four of them qualify, some fundamental non-empirical the “this,” compared to which all of them are equally a changing state of affairs, as it were. But even granting that it is not the same as the elements themselves, what is this subject apart from what it appears to be? In Plato’s opinion, it is something like place, or Space, ‘a receptacle and wet-nurse of all becoming.’ Thus, the only reason that we can speak about these things as though they are distinct and self-standing entities is because there is something in which each of them appears in being generated and from which again they perish that can be referred to as “this” or “that” without any trouble.
I think that the *this-such* passage does a great job in explaining why it is necessary that there be that third kind thing. However, Plato does not offer to us anything that could at least approximately call a good argument showing why we need to postulate that it exists as such. Quite the opposite, the dialectic as a whole starts from the assumption that there is a Third kind, end of the story. Plato gave us but one reason, such as it was, for positing the Receptacle right in the *this-such* passage. From then on it was unquestioningly repeated that there is something “without which” the elements could “not” come to be that we happen to have repressed in speech. It is crucial therefore that we start studying intrinsic nature of “fire and the other three” right at where Timaeus’s discourse reaches the impasse of λόγος because the problem it poses throws light on the issue of trustworthiness of sense-perception and the faculty of vision in dealing with what we should call by their names now as ever. By the same token, it opens a new perspective on the source of our acquaintance with these things as they appear to us in nature such that understanding their physical properties requires us to think though that third kind of thing. So Miller:

Our ordinary language takes as given, just as we take as given, that there can be no actual distinction between “that which” comes to be and “coming-to-be”; for example, our speech does not distinguish between “what comes to be fiery” and “coming to be fiery”: we call both “fire” and we experience both as one thing. Plato therefore is consciously challenging the way we speak and think about the objects of our experience and the world around (D. Miller 2003: 88).

It is worthy noticing that *this-such* passage is the last place where Plato would want to doubt the existence of sense-objects to which we can causally refer and not embarrass ourselves this way in such a small length of time because, again, if there were no such things in the first place, a contrast between circular coming-to-be of the elements and the proper referent of “this” would simply never
be able to obtain at the outset: there would be no puzzle and, least of all, the paradox. It is inexplicable why so many people try to find in it a solution to existence of some kind of flux in the world which threatens to our language with collapse as *Thet.* 179C-183C is often seen to be doing.\textsuperscript{96} I think that the collapse of language is not anywhere on the horizon of either of these two dialogues. Moreover, the fact that we do not speak accurately about what we call “water” is by all means not the puzzle that Plato wants us to reflect on. Rather, the puzzle that Plato addresses to us is that “even though the case is as he has described it, what we say is not actually wrong. How can it not be wrong? The answer to this is the solution of the puzzle” (D. Miller 2003: 78).

For that reason, it is worth paying close attention to what Plato is really saying when he declares that there is something “in which” the elements come to be that is the proper referent of τούτο. It is evidently a very counter-intuitive notion because we are not inclined to view the generation and perishing as a matter of moving inside and outside something. In fact, with our ordinary use of language we can just as well state the theory that “the elements turn into each and that each always continues present with its own unchanging nature” (Broadie 2012: 188). How can Plato then, or for that matter anyone, imagine that there is something that exists not because of itself but because there is something which it is in? At any rate, imparting the cause of perishing to exiting out of it on the basis of the distinction between the ‘receiver’ and received seems at least not any less awkward than the naturalist theories that view the four kinds as the elemental

“letters” against which Plato protests. Is Plato’s account really that confused or there is something that we are missing?

Reversing Plato’s usual perspective of the metaphysical being a paradigm for the physical, we might say that the relation of motion to body serves as a conceptual paradigm for the relation between coming-to-be and the third Kind. Coming-to-be, like motion, is a dependent state of affairs that requires a subject, a ‘receiver’ (D. Miller)

I have argued against the construction toioúton…omoión which posits entities that recur over and above the elements themelves. I am in agreement with Miller’s translation of 49E3-7 that views as the subject of toioúton in this sentence a changing state of affairs with which we are intuitively acquainted. Plato’s commentators who adopt different translations of words αει περιφερόμενον ὅμοιον haven’t convincingly made the case in my opinion that what deserves being called πυρ is something other than phenomenal fire. I have also given a particularly positive evaluation of arguments of Dana Miller’s and Sarah Broadie’s interpretations in accordance with which what is fundamentally pointing to the Receptacle is none other than the observed elemental inter-transformation in the physical world. In her book, Miller claims that Plato’s cosmological Third kind results from a conceptual distinction between the process of change and that which is the subject of the process.

As she explains, “that which is (always) coming-to-be <F>” (the second Kind as defined at 27D5-28A4) is a product of an F-directed process change, but “for change to exist there must be something that changes, just as there is something that moves if there is motion” (D. Miller 2003: 51). Thus, the Second kind is not defined simply as “coming to be <F>,” but as “that which comes to be <F>;” the subject of the expression “comes to be” being included necessary. I will not discuss the argument by which she arrives at this conclusion, but generally, as
I will show in a second, it agrees with what Plato says in the *Philebus* 54C2-4:

“each <case of> coming-to-be comes to be for the sake of some other particular being, and <in general> all coming-to-be comes to be for the sake of all being as a whole.” The expression “come to be for the sake of a being” has an emphatically *teleological* connotation. That coming-to-be owes its existence to being, or, more specifically, being F, suggests that it, in turn, is a product of F-directed change.

We find an echo of this in the *Timaeus*, whence a physical thing, as we have seen, is said “to be white in as much as it has the “look and force” of the paradigm of Whiteness” (D. Miller 2003: 44), that is, in as much as it is an “image” thereof (29B3; cf. 48E6) of the paradigm. So, there similarly must be an adequate cause of their having this relation (likeness) in the world of change.

As I have argued in the previous Chapter, on Plato’s account, there is an intricate web of complex structures made out of the “cosmic” materials such that bits of bodily stuff and motion together form two basic factors that underlie everything in the physical world. Plato envisions the pre-cosmos as the state in which the aggregate sum of all materials “was not in a quiet state but was moving disharmoniously and disorderly” (30A4-5; cf. 53A8). In that state, there was nothing that existed, except moving “traces” of the elements that were randomly generated by “shaking” of the Receptacle (53B2). When the Demiurge, or Craftsman, came he eliminated what caused this chaos to appear and brought the world into order (30A5). The Craftsman accomplished it by constructing the geometrical shapes of the elements out of the determinate number of “triangles,” which allowed the elemental bodies to combine in regular ways. As a result of that, the world as a whole that came to be from the Demiurge’s hands was made by him to be most beautiful of all things that have come to be such that physical
change — “which is reducible to the motion of elemental bits” (D. Miller 2003: 51) — is no longer random, but rather proceeds in an ordered way and produces what is best, as far as possible (48A3). According to D. Miller, “This means that change is not random in the world which we as [mortal creatures] inhabit, but proceeds in a determinate way, that is, towards a determinate end” (Ibid.). Now the cosmology of the Timaeus lets us know that all the different ends towards which physical change proceeds are “established by the Demiurge as realizations of the paradigms he consults” (Ibid.), that is, the Forms.

Now, as I have shown in Chapter III, each and every one of the Forms always is an Idea of something that is just one F eternally. Therefore, Forms are the Forms of F-ness. Accordingly, what we see ordered change to be proceeding towards is, properly speaking, F-ness. That is, physical change produces things that can be said to “be” F (e.g., white), though only in a qualified sense so. Thus, Plato treats the expression “coming to be F” in the Timaeus as “ordered change proceeding towards F-ness,” or more concisely, “F-directed change.” That amounts to saying that in so long as something can be said to be “coming to be F” it means that it undergoes F-directed change.97 By this understanding, “whatever comes to be F does so by virtue of the change it undergoes” (Ibid). However, this allows us to move forward beyond the metaphysics of two kinds and “make a further distinction” (48E2-3) in the second Kind, namely, a distinction between the subject of the process itself and the process of change as such. It is a distinction between “that which” comes to be and “coming to be F.”

97 Cf. “For instance, once a wall has been painted white, Plato could say that the wall “is” white — meaning that the wall has “come to be” white temporarily — and at the same time he could hold that the wall “is” white because the constantly changing material bits on the wall continue to affect our visual rays such that we consider the wall to be white, which would mean that “being” white is actually a process” (D. Miller 2003: 58).
As the analysis of the Form of the Good in Chapter III made it explicit, the existence of more than one kind of things need not imply that there are any independent existing things that are members of either one of them and at the same time different from the things that fall under the other kind. As it warrants noting, like the the τρίτογ γένος of the *Republic*, the Third kind of the *Timaeus* owes its existence to an operation of purely conceptual distinction, like the more common one between motion and thing that is moving. There is a subject of the process — that much we can grant to Plato on any conditions. But, then, why after he separates the Third kind out of the second does Plato go on immediately to call the third kind of thing, the Receptacle, “that in which” for the elemental coming-to-be? Does it entail a separate claim and, if so, how does it add up to the Third kind already being “that which,” properly speaking, comes to be? As I will show next, the introduction of the Third kind somehow implies that the second Kind receives a new definition. But I will return to that at the end.

Once the Third kind has been distinguished, Plato would want to use language that effectively reflects the difference that there is between “that which” comes to be and coming-to-be as such. Fortunately, there is such a term that will do this work him, namely, the verb “to receive” about which Plato has a lot to say in the *Phaedo*. In the context of the *Phaedo*, Plato uses it to distinguish between a thing and the properties that the thing possesses. In effect, Plato makes Socrates say that whereas it is acceptable to speak of the opposite thing, so long as they posses opposite properties, as coming to be out of the opposite things, it is not at all the case that one could say about the opposite properties themselves (e.g. tallness/shortness, oddness/evenness), by analogy, that they come to be out of one another (103B2-6). On Socrates’s account, whereas things do ‘receive the coming-
to-be’ of opposite properties (e.g. Socrates, being short, receives the coming-to-be of tallness when he stands next to someone who is shorter than he), properties, in contrast, do not ‘receive the coming-to-be’ of their opposites (103C1-2). But there is an exception to this rule. The exception consists in the fact that when there is some property, $F$-ness, that, as we might call it, is “essential” to a thing, such as cold to snow, then the thing that has this property technically cannot ‘receive the coming-to-be’ of its opposite, not-$F$-ness, or else it would cease to be simpliciter. Concordantly, the properties themselves cannot ‘receive the coming-to-be’ of their opposites precisely because were they to do so they would cease to be, that is, cease to be $F$. As for the things, the reason that each always can ‘receive the coming-to-be’ of the property not-$F$-ness when they already have the property $F$-ness is because it will therefore not cease to be simpliciter (“but only cease to be $F$, while continuing to be $G$, $H$, and so on and coming to be not-$F$” [D. Miller 2003: 52]).

The general principle, then, is that a thing can ‘receive the coming-to-be’ of some $F$-ness if and only if it will therefore not cease to be what it is. Conversely, that which “receives” satisfies these conditions: a) being something; b) being able to remain to be that while receiving. It follows that what “the receiver receives does not change it in some essential way,” (Ibid.) as Socrates remains Socrates, whilst and despite “receiving” shortness or tallness: “I Socrates, having received and submitted to shortness, and still being who I am, precisely the same

<individual>, am <now> short” (102E4-5). Thus, as D. Miller observes, “the receiver is what it is independently of what it receives” (D. Miller 2003: 53). Only the category of objects that falls under that description can ‘receive the coming-to-be’ of some property and by the same token “come to be $F$.” As it is evident, using
the term “to receive” allows Plato to make a sound distinction between *that which* comes to be (in specific, the receiver, the subject of coming-to-be) and coming-to-be *< F>* (that which is received). There is a clear philosophical import of the *Phaedo*’s distinction between the receiver and that which is received into the *Timaeus*. Plato uses the language thus made available to characterize the Third kind him as “receiving” the second kind so long as the third kind of thing is first and foremost “a receiver (or, receptacle) of all genesis” (49A5-6).

Perhaps the expression most used most consistently for the third Kind is “that in which” (τὸ ἐν ὧ), as in “that in which *<the second Kind> comes to be” (τὸ ἐν ὧ γίγνεται [50D1]). Just as the word “container” both refers to and distinguishes itself from what is “contained,” so the expression for the third Kind both refers to and distinguishes itself from the second Kind, that which comes to be “in” it” (D. Miller 2003: 53)

Still, what is the work that the pronoun ἐν supposed to be doing here requires further conceptual clarification. We will have to turn to the *Phaedo* for that one more time. There, Socrates makes an argument to the effect that because Simmias is both taller than Socrates and shorter than Phaedo, “both tallness and shortness are in Simmias” (102B5-6). By analogy, when he is placed next to Simmias, Socrates is said to “receive and submit to shortness” (102E3-4). As Plato explains, in this situation the expressions Socrates is “short” and shortness is “being in him” (E5-7) by their nature have one and the same meaning. That is, when we view Socrates in relation to Simmias’s height then Socrates is said to “receive” shortness and the shortness is “in” him. Now by saying that “shortness is ‘in’ Socrates” Plato ‘does not intend to claim that the Form of Shortness is physically “in” Socrates, but that Socrates, by standing next to Simmias, has a relation to the Form such that he can be said to be short’ (D. Miller 2003: 54).
As I have demonstrated ostensibly in Chapter III, Plato regularly operates with a number of different expressions that he deploys whenever he needs a distinction, or separation, between Forms and the particulars with respect to “being F” to make appearance at any point in his dialogues. So, we have an expression “x (Socrates) participates in the Form of F-ness” that means just what “Socrates is short” and “shortness is in Socrates” is saying, but when Plato wants to emphasize a dependency of the particulars for “being F” on the Forms he will put it rather this way: “Socrates comes to be short.” Therefore, “x comes to be F” is equivalent to “x participates in the Form of F-ness” and “the Form of F-ness is present in x” (see 100D5-6). By extension, as I have explained a second ago, it is also equivalent to “x receives the coming-to-be of F-ness.”

Additionally, as it bears emphasizing, “when Socrates uses the “in” expression, as “the Form of Shortness is present in Socrates” and “shortness is in Socrates,” it signifies just what “Socrates comes to be short” signifies, and just as Socrates is the subject term in the latter, so “in Socrates” is the subject term in the former” (Ibid.). I am suggesting that in both cases “Socrates” and “in Socrates” is metaphysically, not grammatically, the subject (of the process of change, i.e., “that which” come to be) of the expression. Now, technically speaking, there is one advantage of the expression “in” that its counterparts in Platonic arsenal do not have. It serves to highlight “a distinction between a subject such as Socrates and a property, F-ness, that the subject possesses. It does so because we do not tend to identify a container with what it contains” (Ibid.). For that reason, to distinguish the Third kind from the second in the Timaeus, Plato

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98 Socrates distinguishes between Shortness itself (the Form of F-ness), or “in nature,” and shortness “in us” (F-ness in x) (102D6-7; 103B5). It is correct to say only that the Form of F-ness is present in us, whereas one can correctly say that F-ness is in us.
speaks of the former as “that in which” coming-to-be of the elements and, by extension, of the body appears. It appears that the way Plato arrives at the notion of the “that in which” is by making out of the two equivalent expressions “$x$ coming to be $F$” and “$F$-ness being in $x$” a compound phrase “coming to be $F$ in $x$” in which the Third kind figures as the subject, “leaving a new second Kind as ‘coming to be $F$.’” (Ibid).

Though, Plato does not use the expression “coming to be $F$ in $x$” directly. The reason being that “It is awkward because ‘in $x$’ cannot serve cannot serve as a grammatical subject of ‘coming to be.’ Therefore one would expect a third term, such ‘$y$ coming to be $F$ in $x$’” (Ibid.). Still Plato does use the expression indirectly, as we have seen. In this-such passage, the Receptacle gets to be described as “that in which each one of them always coming to be appears and again from there vanishes” (49E7-8). Awkward or not, by this single phrase, Plato saves the validity of our ordinary use of language that has been endangered by the observable circularity of the coming-to-be of the elements. Having broken down all things that there are into three Kinds, Plato can now assert that, strictly speaking, before the elements exist as they move into the Receptacle just as they cease to exist when the exit out of it. Bodies corresponding to the geometrical shapes of the elements, being corporeal, are physical things; as physical things, they can be said to “appear” if and only if they are in the Receptacle.

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99 I am indebted for pointing out to me the formulas appearing in the last chapter to D. Miller’s The Third Kind in Plato’s Timaeus (2003).

100 Cf. Miller: “The apparent need for a third term, “$y$”... led Cherniss and others to posit the self-identical, recurrent characteristics that enter and depart from the Receptacle.” So, Cherniss: “ἀπαν ὀδοντος ἢ ἐξένεα ἡ πυρ is predicate of τὸ διὰ παντός τοιοῦτον, and this itself proves that τὸ διὰ παντός is a general formula in which τοιοῦτον a ‘variable.’” However, a more complete formula of the expression of elemental coming-to-be will read: fire is “a portion of the Receptacle coming to be fiery (=F),” which makes a variable “$y$” in the equation redundant.
Therefore it would not be accurate to say that “fire” (or something else) comes to be fiery in the Receptacle, that is, that fire (or something else) is some “y” that comes to be fiery (= F) in the Receptacle (= x). One must say instead that fire is a “coming to be fiery in the Receptacle.” Accordingly, Plato eventually defines fire as “the Receptacle coming to be fiery” (= “x coming to be F”) and an individual fire body as “a portion of the Receptacle coming to be fiery” (see 51B4-6) (D. Miller 2003: 55)

There are also instances of Plato’s usage of the expression “that in which” that come from the Republic. When discussing the nature of light and what it contributes it makes to allow seeing Plato says: “Seeing is not the sun, nor is that in which <seeing> comes to be, namely what we call the eye” (508A11-B1). By the act of “seeing,” then Plato understands a specific process in which the visual stream coalescing with daylight interacts in some way with particles from objects. As a consequence of this interact, which produces seeing, “‘Seeing,’ therefore, is a process that ‘comes to be in’ the eye” (D. Miller 2003: 55)

The Third kind, then, is the “in which” coming-to-be occurs or takes place. The spatial metaphor proves to be especially suitable because one of the main questions that is intimately connected with the existence of the Receptacle is the use that the Demiurge makes of it in constructing the primary bodies of the elements. The upshot of the exposition of the whole dialogue, as it has been pointed by his contemporary Aristotle\textsuperscript{101} and in modern times by E. Zeller is that “matter — at least in one sense of the word — has to be identified with empty space” (Jammer 1993: 14). I find it to be a plausible theory, but not a conclusive sentence. I think that Plato himself did not think of the geometric shapes of the elements as made out of some vacancy inside, as he explicitly denies the existence of void. D. Miller argues that the fact the Platonic solids are composed of plane

\textsuperscript{101} Aristotle, \textit{Phys.} 209B.
surfaces does not preclude the constituent triangles from being some kind physical things the nature of which Plato simply declines to specify because of the restrictions imposed by the level of technological advancement on the instruments of observation. I think Plato would not suffer any distress if he found out about that the three-dimensional corporeal body is not the only nature of physical things, considering that his methods differ so much from that which are practiced by modern scientists as much as materialists during his lifetime. I leave it to the reader to decide where it leaves the cosmology of the Timaeus by the virtue of “likely accounts.”
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