The metamorphosis of change: a study of Plato's theory of change

Yue, S.

Chapter IV Myth, Nature, Soul and the Mutable World: Plato's Second Model of Change and Motion in His Later Dialogues

In the preceding chapters, we have presented the gradual establishment and eventual collapse of Plato's first model. This phase of Plato's work seeks to comprehend and interpret the affirmed "fact" that the materials and sensible are always changing between the opposites, while the Form or What-is necessarily remains immutable, never undergoing any generation. And Plato posits in his first model that all those changes oscillating between opposites are caused by participating in corresponding Forms. Besides, this mechanism enables differentiation between the generative changes and the non-generative motions. Our argument has shown that the first model fundamentally depends on Plato's adoption of Parmenides' principle. In the third chapter, through comprehensive examination and reflection, we have sufficiently exposed the untenability of this mechanism, for to participate in a Form does not necessarily lead to a generation. Contrarily, the Forms are also able to associate with other Forms through mutual sharing, circumventing any generation as they retain their inherent nature being unchanged during this process. At the same time, the scope of Forms is notably restricted, so they can no longer cover all changes of the sensible. Consequently, Plato's first model is ultimately unsuccessful.

Nevertheless, the previous discussions never rejects that the sensibles are perpetually in motion and change. And Plato still maintains that the true Form, despite undergoing several motions, never experiences any generative change. Moreover, while participation in a Form is proved not

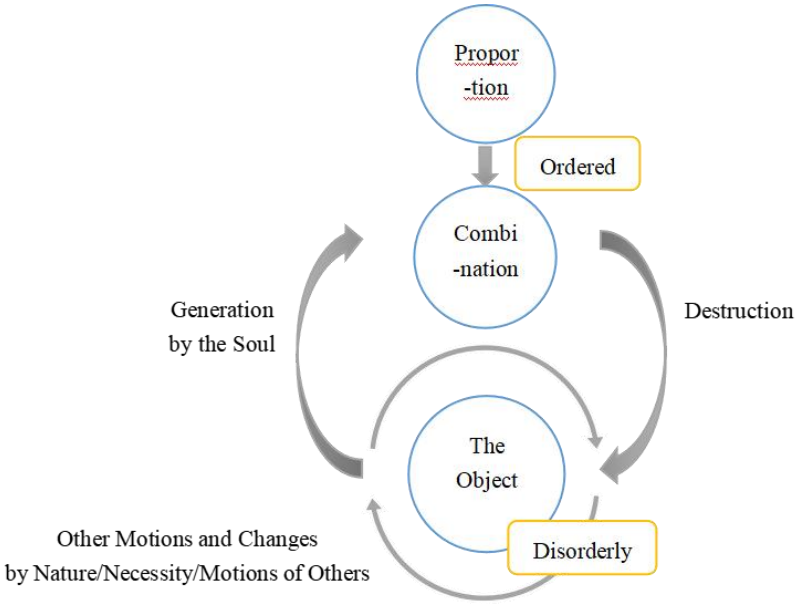
to be a sufficient condition of generation, Plato does not refute the possibility that such sort of participation might be a necessary condition of generation. Additionally, the introduction of the concept of "nature", in turn, also could significantly contribute to his analysis of change and motion. Therefore, Plato embarks on his second voyage of exploring the motion theory with his second model, presented in his late dialogues: the *Statesman*, the *Philebus*, the *Timaeus* and the *Laws*. These dialogues, despite their distinct aims and contexts, converge on a common framework and thinking regarding motion.

Plato's second model of change and motion encompasses the following points:

(1) Inherent Motion: Unlike the first model, now the sensibles can by their own nature change without participating in a Form. This idea is exemplified by the disorderly change in the *Timaeus* and the oscillating alteration between opposites in the *Philebus*.
(2) Order. The fundamental essence of these motions and changes is that they lack order or proper measurement.
(3) Generation and Destruction. A new thing then comes to be generatively and becomes good, when the object acquires some sort of order or mathematical proportion from an external source. The loss of such order leads to its destruction.
(4) Cause of Change and Motion. The soul, including Demiurge and the gods, is considered the ultimate and primary reason for all generations and even other forms of motion. It brings order into the disordered things directly or through a sequential mechanism in which one moves another.

Thus, in contrast to the first model, the Parmenidean principle is no longer central in Plato's theory of motion and change. Plato's second model, then, pivots on three key points. First, the analysis of nature, first established in the *Sophist*, plays an essential role in the meantime. As we will see, Plato now allows things to move and change by their own nature, including the inner oscillations of the material things and the disorderly motions. Second, now generation is caused by introducing an order, although Plato still uses the concept of Form. And he now emphasizes that such order manifests due measurement or mathematical proportion. Third, the Form or order itself is not a sufficient reason for generation. Instead, the soul, in its broadest sense, is identified as the ultimate reason. Accordingly, Plato solves the challenges he left which we have brought forward in the previous chapters, culminating in his final perspective of the motion problem.

This second model could be illustrated by the following chart:



Plato does not present his second model in a straightforward and logical form. Rather, the argumentations of the second model in those later dialogues are partially concealed by his obscure cosmological myths. This might indicate that Plato would not like to endorse every detail of these myths, nor does he promise that the myths across different dialogues are entirely coherent with each other. Nevertheless, he does provide an explicit and consistent story underlying the various myths. We are going to examine these dialogues one after another.

1. The Myth of Reversal of the Universe and the Due Measure in the *Statesman*

The story of the *Statesman* happens immediately after the conversation of the *Sophist*. The Eleatic Stranger, now, turns to search for the statesman, choosing the young Socrates as his interlocutor and a replacement for Theaetetus (*Plt*. 257c; 258b). This dialogue, indeed, is more or less overlooked. On the one hand, it is always viewed as a merely "transitional dialogue that belongs between the *Republic* and the *Laws*". This reading explicitly views the *Statesman* as simply an incomplete and immature representation of Plato's late thought, thus lacking independent value to some extent.[215] On the other hand, the Statesman itself seems to be an elusive and tanglesome text. According to Amadou and Sampson's words, it is "a textual web, with different images and metaphors, like various threads, woven together."[216] However, from our perspective, the *Statesman* indeed is essential for it seems to be the outline of Plato's late theory of change and motion. It does not only lay the foundation for his second model after the thorough reflections represented in the previous dialogues by introducing the very crucial notions and approach of his new theory, but also shows how this fresh understanding weaves together Plato's metaphysical ideas with his cosmological and political thoughts. In the *Statesman*, Plato's corresponding discussions mainly focus on two issues. Therefore, in this section, we will deeply analyze them. First, we

---

[215] Sampson's summary and criticisms of this reading, cf. Sampson, 2020: 486-487. And Michelini's opposition, which Sampson also cites, is worthy to repeat. Michelini points out that this reading "tend[s] to reduce a literary text to a pseudo-historical document that records the author's confused state of mind, rather than examine it as an intentional construct". Michelini, 2000: 182; Sampson, 2020: 487, n.10.

[216] Sampson, 2020: 488.

will discuss the myth of the reversal universe. And then the conversation concerning the due measure.

1.1 The Myth and Its Indications

In the *Statesman*, in order to accurately separate the statesman from the herdsman, the Eleatic Stranger asserts that he is going to tell a great story (268d). And he contends that this myth is the origin of many Greek stories, such as the god's changing the moving direction of the sun and the stars for Atreus as well as human beings' birth from earth at the age of Kronos (268e-269b).[217] According to the Stranger's myth, the god sometimes guides the universe and helps it move in a circle, while at other times when the god lets the universe go and then the latter revolves backwards and turns to rotate in the opposite direction (269c-d). The myth unfolds in the following stages:

A. Since the universe is now moving in the direction of its present rotation, now in the opposite direction, this change of moving direction must be "the greatest and the most complete turning of all". At that time, (1) most human beings and other living creatures destruct, while only small scale survives. (2) The universe retrogrades by beginning to move in the opposite direction compared with the one that now obtains. (3) In accordance with it, every human being and living creature ceases ageing but becomes younger and younger until simply disappears. (4) The creature becomes

[217] The historical context and literal resources of the Stranger's myth, cf. Vidal-Naquet, 1978.

earth-born for the dead lying in the earth come back to life. (270b-271c)

B. In the time of Kronos' power, the universe is guided and taken care of by the god to rotate as a whole. And the world, in turn, is divided up by the gods ruling over them. These gods rule the living things like herdsmen by providing all that the latter need. Hence, (1) the living things have no political constitutions nor families. They do not have any memory of the past, nor do they need any cultivation to acquire food. (2) They hence have abundant leisure time to do philosophy by conversing with each other and with animals. (271c-272d)

C. When the time of all things has been completed, the god lets the universe go by retiring to its observation-post. The world-order, then, turns back again in the opposite direction due to its innate desire. And all those inferior gods, similarly, let go in their turn the parts of the world. Next, being impelled with opposing movement, the universe produces a great tremor in itself and another destruction of all living creatures. (272d-273a)

D. After a long period of chaotic time, the universe gradually attains calm from its previous tremors by setting itself in a new order. In this time, the universe takes charge of itself and the things within in by itself. (1) At the beginning, it could accurately remember the teaching of the god. (2) But then the memories become more and more dimly because of its bodily element. (3) In the end, the universe reaches the point where it is in danger of destruction. (273a-d)

E. At this time, the god takes his position again by "turning round what had become diseased and been broken apart in the previous rotation, when it was left to itself, orders it and by setting it straight renders it immortal and ageless." (273d-e)
F. When the world-order turns back again by moving in the direction as that is obtained now, the living creatures once again grow old and are no longer born from the earth. In this time, (1) the god does not herd human beings and other creatures. (2) Thus, the majority of animals come to be wild by owning an aggressive nature. (3) The human beings are weak and defenseless, so the gods send them various sorts of crafts and arts as gifts. (273e-274e).

This is the synopsis of the Stranger's myth. It does not merely describe the evolutionary history of the whole cosmos, but also encapsulates an essential theory concerning the understanding of generation and motion in general. In the following analysis, we will first (I) scan different readings on the structure of this myth, and then (II) delve into the theme of the universe's disorderly motion.

The structure of the myth, or division of cosmological history, is not as straightforward as it appears. There are mainly two readings. The traditional view posits that the whole cosmological history is a continuous circulation between the age of Kronos and the age of Zeus—our current era. In this perspective, each Kronos cycle begins with the universe recovering from the chaos of the last cycle (A). In this period, the world, with the guidance and rule of the god, rotates in the opposite direction

compared with the current cosmos (B). Besides, during this period, all living creatures grow younger rather than older, and they are all born from the earth (B). Then, in the age of Zeus, the universe turns to rotate in a retrograde way (C), guiding itself without god's rule (D). The living things, correspondingly, become older instead of younger (F). After all these stages, the universe becomes more and more dangerous, and at the end the god takes charge of the world again, leading the whole universe to the next cycle (E). However, some scholars are not satisfied with this two-stage reading. On the contrary, they divide the history of the universe into three or more phases.[218] The most essential character of their reading is that they attribute the reverse rotation and earth-born story to the transitional period between the age of Kronos and the age of Zeus. Take Rowe's interpretation for instance. In the first phase, the age of Kronos, the world is taken into charge by the god and moves in rotation (B). Then, in the second phase, when the god releases the universe, it turns to move backwards (C), with living beings turning to become younger and earth-born (A). Following this brief reversal and chaotic period, in the era of Zeus, the universe changes its moving direction again, aligning with the age of Kronos, and the creatures are able to grow older once more (D, F). But in this phase, the universe governs itself, becoming more and more difficult to maintain the order (D). Finally, the god intervenes and saves the cosmos again, initiating a new cycle (E).[219] According to this sandwiched structure, the universe in the era of Zeus moves in the same

[218] This view is first provided by Lovejoy and Boas, then defended and argued by Brisson and Rowe. Later, Carone also accepts this approach to some extent. Cf. Rowe, 1995: 13, n. 32; Carone, 2005: 125ff.
[219] Rowe, 1995: 11-13.

direction as in the Kronos age, with the reverse rotation merely serving as a transitory cosmic phenomenon.[220]

We prefer the traditional interpretation. It seems obvious that Rowe's new reading seems to impose a confused and unnatural sequence on the Stranger's cosmological myth. Moreover, prior to his narrative, the Stranger inquires if the young Socrates has ever heard the reverse story of Atreus and the earth-born race myth under Kronos' kinship (268e-269b). then commences his tale by elucidating the rationale and mechanics of reverse rotation (269b-270a). It explicitly underscores the reverse rotation as a central element of the Stranger's myth. However, under Rowe's interpretation where the cosmological history is a sandwiched structure, this reversal rotation would only be a brief transient episode, curtly mentioned in Stranger's account—the Stranger even does not give a specific name for this period.[221] And what is most important for our discussion, this new reading seems to misinterpret the essence and mechanism of the reverse rotation. According to the new reading, the brief and chaotic reversal rotation of the universe results from the body of the cosmos.[222] It is true that the Stranger attributes the cause of

---

[220] As Betegh summarizes, according to the traditional reading, "there is no divine agent operative in our cosmic phase whom we could emulate". These scholars cannot accept this indication, which is their main motivation to develop the alternative reading. Such attitude, as McCabe points out, is based on the fundamental idea that Plato would not allow our era to lack teleology as it is suggested by the traditional reading. Cf. McCabe, 1997: 102-104; Betegh, 2021: 91-92.

[221] Rowe claims that in the age of Kronos, the living creatures are also earth-born, but they are reborn from the earth as babies. In the reverse period, they are reborn from earth as adults. Cf. Rowe, 1995: 193. This reading is also absurd, for there is no clue suggested by the Stranger that he makes such distinction in the myth. It is more literal and natural to argue that there is only one sort of earth-born process which happens in the time of Kronos (272a).

[222] Rowe, 1995: 194.

retrograde rotation to the universe's "allotted and innate desire" (272e5-6). Rowe, however, suggests that this movement is only directed by the body of the cosmos, as he argues that the intelligence of the cosmos soon turns the direction of the world again and guides it, aligning it with the Kronos era's direction by remembering the teachings of the god (273b).[223] This interpretation seems not to be what the Stranger claims in the myth. A reassessment of the Stranger's discussion of the reversal rotation and its cause is necessary. At the beginning of his narration, he states that,

> "Listen then. This universe the god himself sometimes accompanies, guiding it on its way and helping it move in a circle, while at other times he lets it go, when its circuits have completed the measure of the time allotted to it, and of its own accord it revolves backwards, in the opposite direction, being a living creature and having had intelligence assigned to it by the one who fitted it together in the beginning." (269c-d)

Obviously, here the Stranger contrasts the god-guided rotation of the universe with its reversal rotation. And he emphasizes that the universe, when moving in the opposite direction, is itself a living creature, possessing its own intelligence. Consequently, the reversal movement is likely not caused by the body of the cosmos alone, but together with the world soul. The Stranger then elaborates on the reason for the reversal movement:

> "This backward movement is inborn in it from necessity, for the following reason…Remaining permanently in the same state

[223] Rowe, 1995: 195.

> and condition and being permanently the same belongs only to the most divine things of all, and the category of body is not of this order. Now the thing to which we have given the name of 'heavens' and 'world-order' certainly has a portion of many blessed things form its progenitor, but on the other hand, it also has its share of body; in consequence, it is impossible for it to be altogether exempt from change, although as far as is possible, given its capacities, it moves in the same place, in the same way, with a single motion; and this is why it has reverse rotation as its lot, which is the smallest possible variation of its movement." (269d-e)

Therefore, the Stranger describes the motion of the universe in a very subtle way. He attributes the universe's pattern to its inner nature, suggesting that the nature of the universe itself dictates its specific movements. To be more specific. The cosmos is not a homogeneous entity, but a composite entity comprising both the "blessed things"—namely, the intelligence that the Stranger just mentioned—and the material body. As a result, the potential motion of the universe is influenced by both these components. In the narrative context, it is evident that the motion of the intelligence aligns with the direction of the one guided by the god. The intelligence, according to its own nature, would seek to move in accord with the most divine things. The interlocutor later asserts that the world soul can rule the universe well—that is, moving it in order and rotation—so far as it can remember the teaching of the god (273a-b). On the contrary, the body part of the universe is potentially moving in another way, disrupting the perfect movement of the universe and preventing it from rotation in the same

direction as the divine. Then, a literal interpretation of the text implies that it is the intelligence and the body of the universe together as a whole—not solely the body as Rowe suggests—moves in the way different from both the movements of the divine and the body. Accordingly, the universe naturally rotates in reverse "in the same place, in the same way, with a single motion…which is the smallest possible variation of its movement." As Carone astutely observe, the motion of this era is a synthesis between the ideal order of the Kronos age and the potential disorder resulting from the body.[224]

Thus, as the Stranger continues to say, "at times it [viz. the universe] is helped by the guidance of another, divine, cause, acquiring life once more and receiving restored immortality from its craftsman, while at other times, when it is let go, it goes on its own way under its own power, having been let go at such a time as to ravel backwards for many tens of thousands of revolutions because of the very fact that its movement combines the effects of its huge size, perfect balance, and its resting on the smallest of bases." (270a) When the god lets the universe go, the universe, as a whole, immediately rotates backwards by its own nature.

And moreover, the universe's rotation is not perfect due to its material body. The Stranger points out that in the era of Zeus, the universe cannot always maintain its order. He attributes this to "the bodily element in its mixture, its accompaniment since its origins long in the past, because this element was marked by great disorder before entering into the present world-order." (273b) Thus, the bodily component of the universe causes tremendous disorderly motions in the cosmos. Although the universe's

[224] Carone, 2005: 141.

intelligence, without guidance by the god, attempts to maintain the orderly circulation, it increasingly struggles to control the imperfect bodily aspect, which finally disrupts the overall world order.[225]

We can now identify all motions of the universe in this myth. The bodily part of the universe inherently possesses the disorderly motion by its own nature; the intelligence of the universe, by its nature remembering the teaching of the god, potentially rotates in the same direction as the one guided by the god; the universe as a whole, then, by its nature undergoes reversal rotation, moving in the opposite direction from when it is ruled by the god.

So Rowe's new interpretation, suggesting that the reversal rotation is solely caused by the universe's bodily element, appears hardly tenable. Another essential point is that, according to the discussion above, here Plato introduces "nature" as a critical notion analyzing change and motion. It provides the essential instrument to distinguish the perfectly ordered motion and the disorderly motion. Indeed, in his middle dialogue, Plato has already suggested the disorderly motion inhabited in the nature of the embodied soul in the *Phaedrus*. However, it has not been integrated into his first model yet. As we will soon see, the analysis of nature, conversely, will play a pivotal role in Plato's second model of change and motion.

[225] Mohr advocates a similar view by claiming that the World soul is "a maintainer of order against the naturally inherent tendency of the corporeal towards disorder". Cf. Mohr, 1981: 201.

1.2 The Due Measure Issue

After the myth, the interlocutors continue to discuss the craft of statesmanship and attempt to illustrate the art of politics by weaving (279a ff.). And amidst this lengthy exposition of the weaving craft, the Stranger suddenly diverges into a discussion about measurements at 283c. The author, seemingly concerned that this digression might be overlooked by the audience, emphasizes its significance by twice drawing parallels with the digression of What-is-not in the *Sophist* (284b-c; 286b-c). This part of the text, as we will soon see, is crucial as it introduces a new interpretation of the generation. Moreover, the dichotomy of measurements presented here also indicates an ontological idea that lays the groundwork for Plato's further discussions in the *Philebus* and other dialogues. Specifically, it posits that the original sensible things are inherently relative, having no definite properties. And they come to be good and fine things only when combined with due measures according to the specific arts and crafts.

Let me elaborate this in more detail. In this digression, the Stranger first proposes the existence of two types of measurements:

> "About length and brevity and excess and deficiency in general. I suppose the art of measurement relates to all these things… Then let's divide it into two parts. That's what we need towards our present objective…[O]ne part will correspond to the sharing by things in greatness and smallness in relation to each other, the other to what is necessary for generation (τὴν τῆς γενέσεως ἀναγκαίαν οὐσίαν)." (283d1-9)

Thus, the measurements are categorized into two distinct types. The first one pertains to sensible things, which possess a fundamental characteristic: they are not by themselves great or less, heavy or light, but greater or heavier only in relation to something less or lighter. In this text, the Stranger refers to these as excess and deficiency, or greater and less.[226] As the Stranger says several lines later, "by its nature the greater has to be said to be greater than nothing other than the less, and the less in its turn less than the greater, and nothing else" (283d11-e1). This explicitly resonates with the Man-Measure-Doctrine of Protagoras extensively discussed by Plato in the *Theaetetus*. According to this doctrine, nothing possesses any property or characteristic by its own nature. For instance, Socrates is taller than Theaetetus now but will be shorter than him in the future. In this case Socrates' height, tall or short is not an intrinsic attribute of him, but relative to Theaetetus.

In the *Theaetetus*, though Plato thoroughly argues against Protagoras' relativism, he never denies the empirical reality that the properties of the sensible are always relative. Here the *Statesman*, a further critique of Protagoras' Man-Measure-Doctrine is provided.[227] The Stranger acknowledges this form of measurement, but immediately highlights its insufficiency, pointing to the existence of another type of measurement. Namely, as the Stranger continues to say, the measurement in relation to what is necessary for generation (τὴν τῆς γενέσεως ἀναγκαίαν οὐσίαν).[228]

---

[226] Cf. Sayre, 2005: 319-351; Sayre, 2006: 139-170.

[227] Further discussion, cf. Barney, 2021: 116 ff.

[228] The phrase "τὴν τῆς γενέσεως ἀναγκαίαν οὐσίαν" is no doubt confusing. As Sayre summarizes: Jowett translates it as "without which the existence of production would be impossible"; Diès "les nécessités essentielles du devenir"; Skemp "the fixed norm to which [objects] must approximate if they are to exist at all"; Benardete "the necessary (indispensable) being of becoming"; Rowe "what coming into being

So, what precisely is this measurement? Several lines later, the Stranger claims that,

> "It's clear we would divide the art of measurement, cutting it in two in just the way we said, positing as one part of it all those kinds of expertise that measure the number, lengths, depths, breadths, and speeds of things in relation to the opposite, and as the other, all those that measure in relation to what is in due measure, what is fitting, the right moment, what is as it ought to be—everything that removes itself from the extremes to the middle." (284e2-8)

In this text, the Stranger points out that Protagoras' measurement pertains only to the number, lengths, depths or other empirical attributes of the things. In contrast, the type of measurement the Stranger advocates here concerns the due measurement of the standard of fitness, right moment, oughtness, etc. Obviously, the due measurement emphasizes the intellectual rather than the sensible aspects of things.

This due measurement, in turn, serves as the basis for values and the resources of all crafts and arts. The Stranger says that the due measurement is just the "respect in which those of us who are bad and those who are good most differ" (283e5-6) It suggests that the good possess a greater share of this due measure than the bad. Following this, the Stranger then elaborates that,

---

necessarily is"; Waterfield "the fact that there does exist something which is a necessary prerequisite for qualities to occur"; Rosen "the necessary being of genesis"; and himself as "the being necessary for generation". Cf. Sayre, 2005: 323-324. We mainly follow Rosen and Sayre.

> "If someone will admit the existence of the class of the greater in relation to nothing other than the less, it will never be in relation to what is in due measure…[W]ith this account of things we shall destroy…both kinds of expertise themselves and their products, and in particular, we shall make the one we are looking for now, statesmanship, disappear, and the one we said was weaving. For I imagine all such kind of expertise guard against the more and less than what is in due measure not as something which is not but something which is and is troublesome in relation to what they do, and it is by preserving measure in this way that they produce all good and fine things." (284a1-b1)

Therefore, the existence of all arts and crafts hinges on the due measurement, because the arts aim to create "good and fine things". This requires them to organize and weave the sensible things, which are naturally "more and less", by imparting the necessary due measurement. In other words, through due measurement, the arts and crafts give the order—encompassing aspects such as "what is fitting, the right moment, what is as it ought to be", as mentioned by the Stranger—upon the sensible which inherently lacks certainty and norm. Consequently, it is through the application of the arts and crafts, that the "good and fine things" come into being.

At the same time, this view somehow reveals Plato's updated understanding of generation. In the first model, whatever participates in a Form—mainly the sensible Form—undergoes a generation. As we have

argued, this view has been significantly challenged in the *Theaetetus* in which the idea of sensible Form is dismissed. In the meantime, the Stranger suggests that the generation, at least the generation of fine and good things, is to provide the order and due measurement to what is by nature more and less. The Stranger argues that,

> "Is it the case then that just as with the sophist we compelled what is not into being as well as what is, when our argument escaped us down this route, so now it is that we must compel the more and less, in their turn, to become measurable not only in relation to each other but also in relation to the coming-into-being of what is in due measure? For if this has not been agreed, it is certainly not possible for either the statesman or anyone else who possesses knowledge of subjects relating to things done to have come into being in an undisputed way." (284b6-c3)

Thus, as the Stranger finally claims, "[W]hat sometimes many of the sophisticated say, all the time supposing themselves to be expressing something wise, to the effect that there is in fact an art of measurement relating to everything that comes into being—is actually this very thing we have just said." (284e11-285a4)

And this theory of due measurement, in fact, is not an isolated ontological argument within the digression. On the contrary, by forming the metaphysical foundation of weaving, it buttresses the concept of true statesmanship that is later revealed in this dialogue. The interlocutor posits that every kind of expert knowledge will take "what is suitable and

good, and form these, both like and unlike, bringing them all together into one, crafts some single kind of thing with a single capacity." (308c4-7) Within this framework, authentic statesmanship weaves and unites diverse kinds of people and integrates them into a cohesive one (309b ff.). The ideal polis, also, comes into being through such sort of art. Besides, the previously discussed myth may also be grounded in this due measurement theory. For the universe, by its bodily part alone, naturally moves in a disorderly way. It is only through the order imposed by the god or the intelligence that the universe undergoes the rotation.

In summary, in the *Statesman* Plato introduces nature as a crucial element for analyzing motion. He particularly brings forward the concept of disorderly motion. Besides, through the discussion of due measurement, he briefly introduces a new perspective on the essence and mechanism of generation. As we will see, these ideas will recur in subsequent dialogues, effectively heralding Plato's second model of change and motion. The myth lays the groundwork for the analysis of "Necessity" discussed in the *Timaeus*, while the due measurement is intricately connected with the four-fold ontology of the *Philebus*.

2. The *Philebus* and its Four-fold Division

Though primarily focused on pursuing what is pleasure, the *Philebus* also delves into a complicated and confusing ontological discussion at its outset. To determine which one of the two, pleasure and reason, leads to the second best life, Socrates introduces a four-fold division of "everything that actually exists now" (*Philb*. 23c). At the end of this exploration, he summarizes that the four categories of "everything" are:

> "As the first I count the unlimited, limit as the second, afterwards in third place comes the being which is mixed and generated out of those two. And no mistake is made if the cause of this mixture and generation is counted as number four." (27b-c)

The meaning and essence of these four categories are highly controversial. In this section, we would like to argue that this division, indeed, highlights Plato's advanced development of his second model of change and motion, following the *Statesman*. Socrates' characterization of the 'unlimited', termed as *apeiron*, indicates that the sensible particulars are changing ceaselessly between opposites by their own nature. And when these particulars combine with the 'limit' or *peras*, the good mixture comes to be, signifying Plato's understanding of generation. Concurrently, he further proposes that it is the soul that instigates this process of generation. Let's examine these points successively.

2.1 *Peras* and *Apeiron*

At the beginning of this exploration, Socrates posits that he is going to "make a division of everything that actually exists now"[229], and he promptly identifies the unlimited (*apeiron*) and the limit (*peras*) as the first two kinds (23c). What exactly do these two kinds represent? Indeed, this is not the first time for the interlocutors to broach these concepts.

[229] Scholars' interpretations on the word "now" diverged. Some advocate that by using this term, Socrates emphasizes that this division only encompasses the sensible objects or phenomena, excluding the Forms. Cf. Hackforth, 1972b: 39; Carone, 2005: 85. On the contrary, some others, Striker for instance, argue that both Forms and the sensible are in all four kinds. Cf. D. Frede, 1993: 18. n. 3. However, it would be better to suspend this issue in the meantime. For we should not assume whether here Plato holds the same view of Form as it is represented in the middle dialogues or not.

They were initially introduced in the alleged "Heavenly Tradition", in which Socrates posits that,

> "It is a gift of the gods to men, or so it seems to me, hurled down from heaven by some Prometheus along with a most dazzling fire. And the people of old, superior to us and living in closer proximity to the gods, have bequeathed us this tale, what is always said to be (τῶν ἀεὶ λεγομένων εἶναι) consists of one and many, having in its nature limit and unlimitedness." (16c-d)

Namely, "what is said to be" by its nature contains both the limit and unlimited. However, the meaning of this proposition is notoriously ambiguous and confusing. Varied interpretations stem from differing readings of the Greek phrase "what is always said to be" (τῶν ἀεὶ λεγομένων εἶναι). This Greek phrase's ambiguity arises because the word "*aei*" is able to modify either "*einai*" or "*legomenōn*". Consequently, this phrase can be translated either as "the things that are said to exist always" or "the things that are always said to be". The former translation strongly implies that the subject being discussed here is what eternally exists without undergoing any change—that is, the Form, while the latter merely suggests a reference to something that is always thought to be being.[230]

Scholars favouring the former interpretation, then, argue that the interlocutor in this passage aims at dealing with the issue of Forms. The Heavenly Tradition, under this view, delineates the relationship among the highest genus, a determinate number of subgenera and species as its

[230] Reshotko, 2010: 93.

natural constitution, and unlimited particulars falling under one genus or Form.[231] On the contrary, proponents of the latter interpretation may naturally suggest that this text concerns physical objects rather than Forms or genus/species relationship. Reshotko, for instance, contends that based on this reading, this sentence refers to something that common people have always spoken of as existing—that is, the physical objects coming-to-be and passing away.[232] Besides, some scholars tend to propose a more inclusive interpretation, suggesting that the range of "what is said to be" in this sentence covers both intellectual Forms and sensible objects.[233]

From our perspective, we would like to advocate that here Socrates appears to discuss specific physical objects, rather than the invisible Form and genus/species relationships.[234] Given that the being here is said to possess both the limit and unlimited in its nature, it probably refers to the third kind of the four-fold division, the mixture of *peras* and *apeiron*, which will be elaborated upon in subsequent pages.[235] The sensible itself, identified as *apeiron*, is indeterminate, lacking any inherent measure and definite property. Indeed, as Gosling astutely observes, the *peras* and *apeiron* are fundamentally Pythagorean concepts. Given this background, *apeiron* is "a term for the mathematical continuum, conceived of as

---

[231] Gosling, 1975: 160; Dancy, 2007.
[232] Reshotko, 2010: 94.
[233] Sayre, 2005: 133-154.
[234] There indeed lacks confident textual evidence showing that Socrates is dealing with genus/species relationship in this part of text. Cf. Hackforth, 1972b: 24; Gosling, 1975: 162-163.
[235] Otherwise, we would have to admit the dilemma found by Dancy that in this Heavenly Tradition, being has both the limit and unlimited in its nature, but in the four-fold division, only the third kind contains both of them. Cf. Dancy, 2007: 61.

infinitely divisible, without measure."[236] And the *peras*, then, refers to the definite quantity, arrangement, or measure. By combing with the *peras*, the *apeiron* comes to be a good and fine being. As the interlocutor continues to elaborate, for example, the sound is unlimited, and a musician should classify the sounds into low, high and equal pitches. Then, the musician ought to learn the number and character of intervals in high and low pitches, as well as by what notes they are defined and what kinds of combinations they form. All of these are together termed harmony (17b-d). In this case, each individual sound, on its own, is unlimited and indeterminate. As Gosling interprets, as the *apeiron* it allows infinite possibilities of sub-division.[237] It can be both high and low, both a note in a harmonious interval and part of a discord chord. And it must be defined by the *peras*, encompassing various pitches, intervals, etc. Finally, they constitute the harmonics.

The meanings of *aperion* and *peras* are further elucidated in the fourfold division. Socrates posits,

> "Check first in the case of the hotter and the colder whether you can conceive a limit, or whether the 'more and less' do not rather reside in these kinds, and while they reside in them do not permit the attainment of any end. For once an end has been reached, they will both have been ended as well." (24a-b)

[236] Gosling, 1975: 196-197. And "*apeiron*" and "*peras*" are also used by other Pre-socratic philosophers. Cf. Kahn, 2014: 165.
[237] Gosling, 1975: 170.

Let's first deal with the *aperion* or the first kind of the fourfold division. In this passage, Socrates argues that the *apeiron* is by its nature "more and less". This phrase indicates the essential character of the *aperion* as lacking definite property and only being perceived relatively.[238] Namely, a sensible object of this kind, by its own nature, can legitimately be described only in comparative terms, such as being hotter than something or colder than another thing, rather than hot or cold by itself. Similarly, Socrates further exemplifies the *apeiron* by "stronger" and "gentler" (24c), "strong and mild", "too much" (24e-25a), "dryer and wetter", "faster and slower", "taller and shorter" (25c), etc. Therefore, the *apeiron* encompasses all sensible things that are not definitively *F* or not-*F* by themselves. As we have cited, according to Gosling's interpretation, it suggests that the *apeiron* is a mathematical continuum within a Protagorean framework. Additionally, Socrates himself appears to view this continuum as a perpetual flux of the sensible.[239] Socrates claims,

> "Our argument forces us to conclude that these things never have and end. And since they are endless, they turn out to be entirely unlimited...Wherever they apply, they prevent everything from adopting a definite quantity; by imposing on all actions the qualification 'stronger' relative to 'gentler' or the reverse, they procure a 'more and less' while doing away with all definite quantity. We are saying now, in effect, that if they do not abolish definite quantity, but let quantity and measurement take a foothold in the domain of the more and less, the strong and mild, they will be driven out of their own territory. For

[238] Thus, the *apeiron* is characterized in relational terms. Cf. Harte, 2002: 182-186; M. L. Gill, 2019: 79.
[239] D. Frede, 1993: xxxiv; Kahn, 2014: 168.

> once they take on a definite quantity, they would no longer be hotter and colder. **The hotter and equally the colder are always in flux and never remain, while definite quantity means stand still and the end of all progression.** The upshot of this argument is that the hotter, together with its opposite, turns out to be unlimited." (24b-d)

Thus, it is clear that the sensible, as the *apeiron*, are perpetually in flux, changing between opposites until being combined with some definite quantity or the *peras*. And by the term "flux", Plato does not merely refer to something change between opposites in relation to itself. The sense of flux, indeed, is much broader. Lynch, reasonably, posits the phenomenological view that the becoming thing is unlimited because it describes "possible ways that a thing can appear when we think or talk about it in a certain way."[240] The most typical examples come from the *Theaetetus*. As we have discussed (p. 91), in this dialogue, six dice become less first compared with four dice then with twelve dice, and Socrates becomes shorter compared with Theaetetus who becomes taller in one year (*Theaet.* 154c; 155b-c). This is also reported by Aristotle and other later philosophers, describing the *apeiron* as "excess and defect", "great and small", "the indefinite dyad", etc. This issue of *apeiron*, according to their report, is a core issue in Plato's esoteric lecture on the Good.[241]

Hence obviously, Plato's reference to flux indicates the constant oscillation of the sensible between opposites—no matter whether they are

---

[240] Lynch, 2013: 52.
[241] Sayre, 2005: 84 ff.; Sayre, 2006: 149 ff.

undergoing self-changes or relational changes, highlighting the indeterminate and unstable essence of the sensible. This contrasts with the first model in which the sensible's change between opposites is attributed to participating in the Forms, but now such change is argued to happen due to the nature of the sensible itself.

Then, concerning the *peras*, Socrates attributes three aspects of characteristics to it. First, it is definite, being opposite to the indeterminate *apeiron*; second, it is the mathematical quantity; finally, it indicates positive values.

To be more specific. As we cited above, the *peras* is "a definite quantity" (*Philb*. 24c). Namely, it will neither undergo any diachronic change nor appear to be different in relation to different things. That is because the *peras* is mathematical. In fact, this character has already been mentioned in the Heavenly Tradition, in which Socrates illustrates that "the motions of the body display other and similar characteristics of this kind, which they say should be measured by numbers and called rhythms and meters" (17d). Clearly, these rhythms and meters, as the *peras* of the bodily motions, are mathematical numbers. Now Socrates further clarifies that the *peras*, countering the *apeiron*, encompasses "'the equal' and 'equality' and, after the equal, things like 'double', and all that is related as number to number or measure to measure" (25a-b). Further, if a sort of *peras* enters into the *apeiron*, it terminates the latter's flux. As we cited above, an unlimited sensible, which by itself always oscillates between hotter and colder, ends of this flux progression when it takes on a definite quantity or *peras* (24d). Take the case of dice in the *Theaetetu*s as an example, the six dice is more than four but less than twelve, thus it is both

more and less, oscillating between these opposites. But when it acquires the definite quantity "equality" by being put beside another six dice, it immediately finishes its vacillation and becomes "equal". Accordingly, the disorderly and even chaotic sensible acquire definite and positive order, becoming some better thing. Socrates posits that the *peras* "contains equal and double, and whatever else puts an end to the conflicts there are among opposites, **making them commensurate and harmonious** by imposing a definite number on them." (25d-e).

This pair of opposites, *peras* and *apeiron*, recalls the due measurement in the *Statesman*.[242] They both indicate Plato's new understanding of the disorderly changes of the sensible beings as well as how these sorts of changes end, which obviously diverges from Plato's first model of change and motion. Aristotle and the ancient commentators advocate that *peras* and *apeiron* here are indeed the Forms and the matter.[243] This interpretation is so influential that it even attracts many modern scholars arguing for similar interpretations.[244] However, from our perspective, this viewpoint seems untenable. On the one hand, "Form" and "matter" are Aristotelian terms rather than Plato's conceptions. On the other hand, this interpretation, is *de facto* suggesting that what Plato argues here repeats his analysis of the cause of change in the *Phaedo*. As we have sufficiently seen, in the *Phaedo*, Socrates maintains that concerning the sensibles, they are not *F* by themselves alone, but by participating in the corresponding Form *F*-ness. But here, even without combining with *peras*, the *apeiron* itself could exist independently, and they oscillate by

[242] Sayre, 2005: xxii. Also, Kahn, 2014: 168.
[243] For instance, Aristotle, *Phys.*, I.4 187a12-23. And Simplicius' commentary on this paragraph, *In Aris Phys.* 150,5 ff.
[244] Gosling, 1975: 161-165.

their inherent nature rather than any participation from outside. Concurrently, in the *Phaedo*, the mechanism of association with Forms applies to all sensible entities, while in the fourfold division, the third kind, or the mixture of *peras* and *apeiron*, encompasses only a very limited range of entities, as we will further discuss.

2.2 The Mixture as Generation

The mixture, as the third kind in the fourfold division, represents Plato's novel interpretation of generation and becoming. To understand this fully, several aspects need elucidation. First, what are the essence and characteristics of the mixture? Then, what is its relationship with the generation? And finally, what is the scope of the mixture?

As we have discussed above, the *apeiron* always oscillates between opposites, and the *peras* terminates its disorderly motion by entering into its domain (24c-d). Then, the combination of *apeiron* and *peras* is the so-called mixture or the third kind. This mixture is not merely a blend, but also the good tangible thing that comes to be from the combination of the chaotic indeterminateness and abstract mathematical ratio as its ingredients. Socrates illustrates it with three examples. First, the right combination of the physical opposites produces the state of health (25e); then, the individual music notes, which by themselves are indeterminate high and low, fast and slow, come to constitute perfect music when they blend with the limit (26a); and finally, moderate and harmonious seasons originate from frost and heat weather by introducing the *peras* (26a-b). Therefore, Socrates posits that,

> "With health there come beauty and strength, and again in our soul there is a host of other excellent qualities. It is the goddess herself…who recognizes how excess and the overabundance of our wickedness allow for no limit in our pleasures and their fulfilment, and she therefore imposes law and order as a limit on them." (26b)

This process, the interlocutor claims, is a generation, compelling the disorderly and indeterminate to become an ordered and fine mixture by introducing the mathematical ratio. And the mixture as a sort of Being is the end of this generative process. Protarchus says that "from such mixture in each case, certain generations (γένεσις) result" (25e). Similarly, the physical elements will produce (γεννάω) health. And what's most important, Socrates summarizes by stating that "I treat all the joint offspring of the other two kinds as a unity, a becoming-into-Being (γένεσιν εἰς οὐσίαν) created through the measures imposed by the limit" (26d). The phrase "becoming-into-Being" explicitly indicates that the mixture is regarded as "Being", while the combination of *peras* and *apeiron*, as a process of eliminating the disorderly motion of the *apeiron*, is the becoming or generation.

This interpretation of generation is pivotal. As we have argued, in the first model, generation is defined as the sensible's participation in the synonymous Form. The hot, for instance, comes to be hot by its associating with Hotness. Thus, the change between opposites in a sensible thing signifies its generation. But now, such sort of oscillation is merely the disorderly motion innate to the sensible's nature, unrelated to generation. And in the meantime, the true generation is the sensible's

sharing some definite order and mathematical ratio, and during this process, it becomes the good and fine thing by ending its disorderly motion. Hence, the generation of the hot is not becoming hot, but becoming the ingredient of a good Being by accepting some certain order.

Further, there exists a teleological hierarchy between the mixture as the Being and that which undergoes the generation. Later in this dialogue, when the interlocutors discuss the issue of genuine pleasure, Socrates posits that "there are two kinds of things, one kind sufficient to itself, the other in need of something else" (53e). And he further clarifies that the former is Being and the latter is Becoming (54a). In this text, Socrates outlines four pairs of characteristics of Becoming and Being:

> (i) Being is self-sufficient. Becoming is needy and not self-sufficient. (53d; 53e)
> (ii) Being is supremely dignified. Becoming comparatively lacks dignity. (53d)
> (iii) Being likes the one beloved. Becoming like a lover. (53d)
> (iv) Being, like a ship, exists for the sake of itself. Becoming, like ship-building, exists for the sake of something besides itself. (54b)[245]

Therefore, sensible things do not have internal telos. Instead, the meaning of their existence refers to the Being which comes to be at the end of their generation by combing with an order. As Socrates further clarifies, "I hold that all ingredients, as well as all tools, and quite generally all materials, are always provided for the sake of some process of generation.

[245] Also cf. Carpenter, 2011.

I further hold that every process of generation in turn always takes place for the sake of some particular being and that all generation taken together takes place for the sake of being as a whole" (54c).

Such a process of becoming does not include all sensible things. As established in the previous analysis, the mixture, according to the interlocutor's theory presented here, is the good and fine things, as the end of coming-into-being. This differs significantly from the first model, in which all changes in the sensible things are categorized as generation. And this view, as we have argued, has already been doubted in the *Parmenides* where the interlocutors suggest that there exists no Form for worthless and undignified things. Now in the *Philebus*, only the emergence and production of orderly and harmonious things are considered generation. Socrates posits,

> "That any kind of mixture that does not in some way or other possess measure or the nature of proportion will necessarily corrupt its ingredients and most of all itself. For there would be no blending in such cases at all but really an unconnected medley, the ruin of whatever happens to be contained in it." (64d-e)

Thus, the outcomes of genuine generation, namely the mixture, must contain the correct mathematical ratio as its fundamental ingredient. Within these products, there shall not exist any incorrect or bad mixtures.[246] And concerning the majority of sensible things, since they

[246] Harte, 2002: 211-212.

do not share in such sort of due measurement, their changes cannot be considered as generation.

2.3 Reason, Soul, and The Cause of Generation

The emergence of such sort of mixture, then, is not a matter of chance. Instead, Socrates argues that reason, as the fourth kind in his fourfold division, is the causal factor behind the mixture and generation. Thus, it is the reason which introduces the order into the disorderly moving sensible, culminating in the creation of the good and fine mixture (27c; 30e; etc.). It is the intelligence of a ship-building craftsman, for instance, which orchestrates the arrangement of wood, metal, and other materials to build the ship, using correct ship-building craft and ratios. Moreover, Socrates is not satisfied with merely arguing for the reason of human beings but also extends the reason to encompass the world-soul as the arranger and cause of this order cosmos. He says, "reason is our king, both over heaven and earth" (28c). By using the term "king" (*basileus*), he underscores the idea that reason is the supreme governor of the whole cosmos like Zeus.[247]

To be more specific. First, Socrates draws a parallel between microcosm and macrocosm. He posits that the elements constituting the bodies of all animals—that is fire, water, air, and earth—also exist in the whole universe, forming the cosmos' body (28e-29d). And further, the elements of the cosmos overwhelm the ones in human beings by size, beauty, and by the display of their power (29c). Accordingly, the elements within us are generated, nourished, and ruled by their cosmic counterparts (29c). Socrates claims, "the body of the universe as a whole provides for the

[247] D. Frede, 1993: 26, n.3; Lorenz, 2019: 99.

sustenance of what is body in our sphere" (29e). Then, similarly, our soul comes from the universe soul (30a). This universe soul, being beautiful and wonderful in its nature, "is recognized as all-encompassing wisdom" and as a cause "it imports the soul and provides training for the body and medicine for its ailments and in other cases order and restitution" (30b). Eventually, the universe soul, as the fourth kind in the fourfold division, guides the *peras* of the cosmos into the enormous amounts of *apeiron*, establishing the prefect order of the world. Socrates says,

> "[A]s we have said often, that there is plenty of the unlimited in the universe as well as sufficient limit, and that there is, above them, a certain cause, of no small significance, that orders and coordinates the years, seasons, and months, and which has every right to the title of wisdom and reason." (30c)

Therefore, the universe soul is the ultimate cause that infuses order into the universe and leads the good combinations to come to be. Though this may not align perfectly with the story told in the *Statesman*, in which the Demiurge is portrayed as introducing the perfect order of the universe while the world soul alone cannot preserve this order, both accounts share the very same fundamental principles regarding the ontological understanding of change and a cosmogony framework.

As we have seen, in the *Statesman*, the sensible particulars are also described as always oscillating between opposites by their nature, and such sort of change is not regarded as generation. This oscillation is terminated by being blended with due measurement which is akin to the *peras* introduced in the *Philebus*. Concurrently, in both dialogues, the

intelligence or soul is portrayed as the very power to organize the universe in good order, leading to the real generations. And this generation, markedly, is different from that in Plato's first model, as it diverges from the change between opposites in the sensible, merely encompassing a very limited scope of entities.

Nevertheless, these two dialogues only briefly outline the doctrine of cosmogony. In the subsequent dialogue, the *Timaeus*, Plato will reveal his theory of this natural universe in greater detail, within the new ontological framework. And Timaeus the interlocutor, explicitly, is presented as more apt, compared to the Eleatic Stranger and Socrates, for leading a dialogue primarily concerned with natural philosophy.

3. Becoming, Necessity and Intellect: The Natural Philosophy in the *Timaeus*

The *Timaeus*, aiming at elaborating Plato's own natural philosophy, provides a very rich discussion of change. Throughout this dialogue, Timaeus the interlocutor narrates the entire progress of cosmogony, discussing the generation of the whole universe and also detailing the multiple changes of various things within this universe. Nonetheless, this discussion presents several confusing aspects.

First, for instance, Timaeus asserts that in the pre-cosmic stage, the Receptacle, as the wetnurse of elements, "sways irregularly in every direction" by shaking the primary things inside and in turn being shaken by them, just like grain that is sifted by winnowing sieves (*Ti.*

52d-53a).[248] Indeed, Timaeus claims that at this stage the stuff in the pre-cosmos is always straying and adrift (48a5-7). He seems to portray these disorderly changes merely as mechanical motions which are not inspired by any soul. However, this depiction appears to contradict Plato's assertion in his middle dialogues that the soul is the ultimate reason for all change. In the *Phaedo*, Socrates criticizes Anaxagoras that although he claims that Nous is the cause of everything, he does not really implement this doctrine when explaining the changes. And in the *Phaedrus*, Socrates proclaims that every soul, as the self-mover, is the cause of every change. Even in the *Timaeus*, the Demiurge is credited to be the cause of the origin of the world (28a-29a). So how to explain this obvious conflict? Cornford attributes the disorderly motion to the irrational part of the world-soul, since nobody can move without a soul.[249] However, the text itself does not explicitly support the existence of an irrational world-soul. Vlastos, on the other side, asserts that Plato does not assume that 'all motion is caused by soul' in the *Timaeus*.[250] Some scholars further advocate that only the intelligible motion is ascribed to the soul in the *Phaedrus* and later in the *Laws*. So the doctrine of soul as the cause of motion avoids conflict with the disorderly motion here.[251] But again, this interpretation requires further examination and sufficient textual evidence from these dialogues. We would better first focus on the issue of what is precisely the cause of such disorderly motion, and then examine whether it could be compatible with the soul's function of leading [?] change and motion.

---

[248] According to Vlastos, the most typical descriptions of disorderly motion locate at *Ti.* 30a, 52d-53b, and 69b. Cf. Vlastos, 1995: 247.
[249] Cornford, 1937: 198-210.
[250] Vlasots, 1995: 258. Another opinion against regarding world-soul as the cause of disorderly motion, cf. Karfík, 2020.
[251] Cf, Zeyl, 2000: xxiv-xxv.

Further, Plato's absolute distinction between Being and Becoming in his middle dialogues echoes in the text of the *Timaeus*. The interlocutor's speech on cosmogony begins by highlighting this distinction. He says, "What is that which always is and has no becoming, and what is that which becomes[252] but never is? The former is grasped by understanding, which involves a reasoned account. It is unchanging. The latter is grasped by opinion, which involves unreasoning sense perception. It comes to be and passes away, but never really is." (27d6-28a4). However, this sharp distinction, as we have seen, has already been given up in some of his later dialogues. For Plato allows being and becoming to be compatible to some degree in these dialogues. In the *Sophist*, for instance, the Stranger argues that Being and Motion, as the Kinds, are able to combine with each other. And in the *Philebus*, Socrates even discusses the alleged "becoming into being". This is one of the reasons for Owen to place the *Timaeus* in the group of middle Platonic dialogues, after the *Republic* and before the later dialogues such as the *Parmenides*, the *Theaetetus* and the *Sophist*.[253] Though Owen's sequence of Platonic dialogues is no longer attractive to contemporary scholars, we still need to deal with this difficulty.

From our perspective, obviously, all these puzzles posed in the *Timaeus* may be hardly solved within the framework of Plato's first model. Concerning the disorderly motion, according to this model, there are two candidates which are able to raise change and motion—the participation

---

[252] Omitting *ae*i of the pharse *ti to gignomenon men aei* after Zeyl and many other scholars.

[253] Owen, 1953: 85-86. Also cf. Cherniss' critical comments on Owen's such view. Cherniss, 1957.

of a Form and the action of a soul. But clearly, neither of them is applicable to Timaeus' story here. The disorderly motion, especially the one at the pre-cosmic stage, appears explicitly unrelated to Form or soul-based if the text is read literally. And then, the strict distinction between being and becoming here, within the framework of Plato's first model, is hardly compatible with Plato's endeavour to reconcile Being and Motion in the *Sophist* and other later dialogues. For as we have argued, the first model is built on the foundation of Plato's adaption of the Parmenidean principle, and according to this theory being can never be associated with becoming.

However, these difficulties may be dissipated under Plato's second model of change and motion. First, as we have discussed in previous sections (esp. pp. 144-147), the second model allows sensible things to move and change according to their own nature, without being inspired by a soul or resulting by participating in a Form. This clearly fits Timaeus' description of disorderly motion. He emphasizes that it is the nature (φύω) of the universe that causes the things inside adrift and move disorderly. And this nature, then, is attributed to the Necessity (ἀνάγκη) in the birth of the universe (48b). Besides, the second model provides a new understanding of generation, where the becoming from disorder to order signifies a generative change. Accordingly, in this dialogue, the birth of the universe is identical to the process by which the disorderly (pre-)cosmos' becomes ordered. After introducing the fundamental distinction between being and becoming, the interlocutor says that the Demiurge "took over all that was visible—not at rest but in discordant and disorderly motion (κινούμενον πλημμελῶς καὶ ἀτάκτως)—and brought it from a state of disorder to one of order, because he believed that order was in every way better than

disorder" (30a3-6). Thus, what Timaeus refers to by using the term "becoming" in his fundamental distinction is the generation from the disorder to the order. In this universe, most of the things are disordered by their own nature. Hence, various motions and changes of the sensible by themselves, strictly speaking, do not belong to the category of generation. Instead, the objects only genuinely come to be when they are combined with some certain order under the guidance of god(s) or Intellect (47e-48a). Thus, Timaeus' sharp distinction aligns more with Plato's second model and his later dialogues rather than his first model and the middle dialogues. Accordingly, in this dialogue, the soul is regarded as the ultimate origin of the becomings.

In summary, the following three key aspects of the second model are pivotal in this dialogue, diffusing in Timaeus' cosmogony story. First, all things except the Forms, including the sensible stuff as well as the soul, possess certain motions and changes due to their own nature. Second, these changes are not considered as real generation or becoming. Instead, the becoming refers to the generative change of things from a disordered state to an order one. Third, the soul is responsible for all becomings, not for all motions and changes. All these principles constitute Plato's final critical response to pre-Socratic philosophers' view on natural philosophy. We will first examine his arguments in the discussion of Necessity, then turn to check the ones in the discussion of Intellect, and finally sketch out the flux theory in this dialogue.

3.1 Necessity as the Cause of Movement

Timaeus claims that the generation of the entire universe should be attributed to two distinct causes. The primary cause, then, is identified as

the Demiurge's imposing order upon the disordered (pre-)cosmos. While the second cause—namely the auxiliary cause—is the Necessity of the sensible. As he asserts, concerning the Necessity as the nature of the sensible,

> "[T]hey make things cold or hot, compact or disperse them, and produce all sorts of similar effects, most people regard them not as auxiliary causes, but as the actual causes of all things. Things like these, however, are totally incapable of possessing any reason or understanding about anything…So anyone who is a lover of understanding and knowledge must of necessity pursues as primary causes those that belong to intelligent nature, and as secondary all those belonging to things that are moved by others and that set still others in motion by necessity…we must describe both types of causes, distinguishing those which possess understanding and thus fashion what is beautiful and good, from those which, when deserted by intelligence, produce only haphazard and disorderly effects every time (ἑκάστοτε)." (46d1-e6)

Clearly, this text could be considered as an extension of Socrates' criticism of Anaxagoras and other natural philosophers in the *Phaedo* in which Socrates points out that most pre-Socratic philosophers recognize only the material cause of the changes in the sensible things. Socrates highlights their oversight of nous or soul as the real essential cause of change, and then he provides the safe answer that the participation of *F*-ness is precisely the reason for a sensible thing to become *F*. However, Plato does not clarify the relationship between these two causes in the

Phaedo. And further, as we have argued in the discussion of the *Parmenides*, Plato explicitly points out that the "safe answer", indeed, is not safe at all. Here a new narrative is presented. The Intellect functions as a primary cause (αἰτία πρώτη) of the things' generation, and the Necessity of the things serves as a secondary and auxiliary cause (συναίτια).[254]

Let's first examine the alleged Necessity. As we said above, the Necessity explains the intrinsic and essential tendency of things to move and change without being guided by an eternal soul. Indeed, it does not merely work in the stage of pre-cosmos by leading to the so-called disorderly motion, but also deeply impacts the potential and actual motion or change of the things in the current universe.

First, concerning the generation of the "elemental letters of the universe" (στοιχεῖα τοῦ παντός, 48b8)—namely, fire, water, air and earth, Timaeus asserts that it is of necessity to introduce the third kind alongside being and becoming. That is one of the most notorious concepts in this dialogue, the Receptacle (ὑποδοχή). The Receptacle plays an essential role in the disorderly motions of the primary elements before the generation of the whole universe. But what is the Receptacle? And how could it function in this way? Timaeus interprets it ambiguously by the following descriptions:

I. "It is a receptacle of all becoming—its wetnurse (τιθήνη), as it were." (49a5-6)

[254] As Kahn says, this seems to be a redefinition of "the Anaxagorean principle of a cosmic Mind by fusing it with the more mythical notion of a cosmic Maker or artisan." Kahn, 2010: 72.

II. “But that in which [viz. the receptacle] they [viz. elements] each appear to keep coming into being and from which they subsequently pass out of being, that’s the only thing to refer to by means of the expressions ‘that’ and ‘this’.” (49e7-50a2)

III. “We must always refer to it [viz. the receptacle] by the same term, for it does not depart from its own character in any way. Not only does it always receive all things, it has never in any way whatever taken on any characteristic similar to any of the things that enter it.” (50b6-c2)

IV. “Its nature is to be available for anything to make its impression upon, and it is modified, shaped and reshaped by the things that enter it These are the things that make it appear different at different times.” (50c2-4)

V. “It is in fact appropriate to compare the receiving to a mother, the source to a father, and the nature between them to their offspring.” (50d2-4)

VI. “This is why the things that are to receive in itself all the elemental kinds must be totally devoid of any characteristic.” (50e4-5)

VII. “But if we speak of it as an invisible and characterless sort of thing, one that receives all things and shares in a most perplexing way in what is intelligible, a thing extremely difficult arrive at its nature on the basis of what we’ve said so far, the most correct way to speak of it may well be this: the part of it that gets ignited

appears on each occasion as fire, the dampened part as water, and parts as earth or air in so far as it receives the imitations of these." (51a7-b6)

VIII. "And the third type is space (χώρα), which exists always and cannot be destroyed. It provides a fixed state for all things that come to be. It is itself apprehended by a kind of bastard reasoning that does not involve sense perception, and it is hardly even an object of conviction." (52a8-b2)

These descriptions seem to conflict with themselves, for Timaeus attributes two different essences to the Receptacle or the alleged "third kind". On the one hand, as some may advocate, the Receptacle seems to be the space in which the elements as well as sensible things come to be and pass away (II, III, VIII). On the other hand, some others with some probability propose that the Receptacle acts as the material or stuff of the elements and other sensible things (IV, V, VII). Zeyl points out that these two aspects, indeed, are not inherently incompatible. From his perspective, the Receptacle is the "malleable filled space".[255] The space here, according to him, is not the Newtonian concept of a thoroughly empty space merely providing the location, but rather resembles the modern concept of "room". He then clarifies his view by stating that "the Receptacle is a plenum or stuff, then, not sheer (empty) space, which nevertheless also provides the room for certain parts of itself to travel through."[256]

---

[255] Miller provides an alternative besides these three views that the space and the matter are two distinct entities, rather than one entity possessing two conflict characters, which both belong to the alleged third kind. Cf. Miller, 2003.

[256] Zeyl, 2000: lxiii. Also cf., Zeyl, 2009.

Zeyl's idea might rightly reveal what Plato intends to express in this text. This view might be further elucidated through the following metaphor. As we have cited, in the text Timaeus likens the combination of Form and Receptacle to father and mother (V). And indeed, the latter is always regarded as the analogue of cultivation in classical Greek literature. In Sophocles' *Antigone*, for instance, when Creon comments on the execution of Antigone, the fiancée of his son, he says, "there are other lands for him to plough" (ἀρώσιμοι γὰρ χἀτέρων εἰσὶν γύαι. Soph. *Ant.* 569). The analogy draws a parallel between the Receptacle and its offspring, namely the elements, to the land and crop. It is explicit that the land both provides location and nutrition for the crop. Thus, on the one hand, the Receptacle can be viewed as the field in which the elements both generate and destruct. On the other hand, it also likes the field by being full of triangles which serve as the constitution of the elements.

Then, we are able to examine the role the Receptacle plays in the disorderly motion of the elements and other entities. Timaeus depicts the tumultuous state of the pre-cosmos by claiming that,

> "Now as the wetnurse of becoming turns watery and fiery and receives the character of earth and air, and as it acquires all the properties that come with these characters, it takes on a variety of visible aspects, but because it is filled with powers that are neither similar nor evenly balanced, no part of it is in balance. It sways irregularly in every direction as it is shaken by those things, and being set in motion it in turn shakes them. And as they are moved, they drift continually, some in one direction

> and others in others, separating from one another. They are winnowed out, as it were, like grain that is sifted by winnowing sieves or other such implements. They are carried off and settle down, the dense and heavy ones in one direction, and the rare and light ones to another place. That is now at that time the four kinds were being shaken by the receiver, which as itself agitating like a shaking machine, separating the kinds most unlike each other furthest apart and pushing those most like each other closest together into the same region." (52d4-53a6)

In this phase, the four kinds, though possess certain properties, are not true elements as they all lack the proportion and measure endowed by the deity (53a-b). These primary bodies, due to their internal characteristics—such as dense and heavy, rare and light—disrupt the equilibrium of the Receptacle, causing it to move irregularly in all directions. The disorderly movement of the Receptacle, in turn, shakes the primary bodies. Hence, through the Receptacle as a medium, the primary bodies move themselves disorderly, driven by their inherent nature and characteristics. This sort of motion is regarded to be attributed to the sensible things themselves—referred to as the "Necessity"—occurring independently of the god's guidance, as Timaeus asserts that "they were indeed in the condition one would expect thoroughly god-forsaken things to be in" (53b2-4).

Besides, the influence of Necessity extends beyond merely instigating the motion of the elements and other sensible things during the pre-cosmic phase. Timaeus seems to imply that the unbalance initiated by the interplay between the Receptacle and elements does not come to an end

after the generation of the universe, but continues to affect the motions and transformations within the cosmos (57d7-58a2).[257] For he posits that the universe, being round and naturally gathered in upon itself, constricts the elements inside and expels any empty space. This action, then, leads to the apparent perpetual transformation of elements and entities into one another. To be more specific, because of such gathering tendency and activity of the universe, the subtle elements fire and air come to infiltrate into the gaps among the gathering of the other larger elements. Then the smaller elements are placed among the larger ones, which leads to their destruction, generation and becoming other elements. This is because the larger elements tend to cause the smaller ones to coalesce, while the smaller ones to break up the larger (58a-c). As Timaeus interprets,

> "When earth encounters fire and is broken up by fire's sharpness, it will drift about—whether the braking up occurred within fire itself, or within a mass of air or water—until its parts meet again somewhere, refit themselves together and become earth again. The reason is that the parts of earth will never pass into another form. But when water is broken up into parts by fire or even by air, it could happen that the parts recombine to form one corpuscle of fire and two of air. And the fragments of air could produce, form any single particle that is broke up, two fire corpuscles. And conversely, whenever a small amount of fire is enveloped by a large quantity of air or water or perhaps earth and is agitated inside them as they move, and in spite of its resistance is beaten and shattered to bits, then any two fire corpuscles may combine to constitute a single form

[257] Zeyl, in Cooper, 1997: 1260, n. 32.

> of air. And when air is overpowered and broken down, then two and one half entire forms of air will be consolidated into a single, entire form of water." (56d1-e7)

In short, Timaeus proposes that the aggregation of elements leads to their transformation: fire will become air, and then water; conversely, when the elements are broken up, water will become air, and then fire. Earth can become nothing but the earth itself. Such transformation mechanism is grounded in the constructions of these four elements. In Timaeus' narration, fire is a tetrahedron which has 24 half-equilateral triangles (that is, the scalene right-angled triangle proportioned as $1:\sqrt{3}:2$), air is an octahedron containing 48 such half-equilateral triangles, and water is an icosahedron composed of 120 half-equilateral triangles, while earth, as a cube, has 24 isosceles right-angled triangles (54d5-55c6; 55d7-56c7).

And then, since the elements are forced to generate and destruct due to the rotation of the universe, preventing them from staying at the position of their own region. As we have seen, because of the disorderly shaking movement prior to the generation of the cosmos, the primary bodies most unlike each other are separated furthest apart and those most like each other are pushed closest together into the same region. Consequently, different kinds of primary bodies occupy different regions of space due to their inner characteristics—that is, dense and heavy, or rare and light (52e-53a). Thus, now, when an element transforms another sort rather than it was, it acquires a new position, necessitating a relocation to the new position where it should stay. And such movement, again, causes further unbalance within the universe. Timaeus says,

> "For as each changes in quantity, it also changes the position of its region. This, then, is how and why the occurrence of non-uniformity is perpetually preserved, and so sets these bodies in perpetual motion, both now and in the future without interruption." (58c1-4)

Thus, the inequality within the universe instigates the movement of the elements, which in turn perpetuates further imbalance, resulting in an unending circulation. Therefore, throughout this whole process, the Necessity, as the inner tendency of the primary bodies, at least results in the motion of these bodies in the way that it causes the relocation of the newly formed bodies towards their respective appropriate positions or regions within the universe. Consequently, this type of movement, perpetuates a state of everlasting and disorderly unbalance in this sensible universe.[258]

This may also aid in elucidating the mechanism of the sensible things' changes. For instance, the liquefiable is able to "flow" because it acquires non-uniformity and hence becomes more susceptible to motion when fire penetrates it and breaks it up (58d-59a). It is explicit that fire disrupts the equilibrium of the liquefiable, then its elements—water—are moved and able to move disorderly due to this non-uniformity and the Necessity of water. By consequence the liquefiable "flows".

[258] Another endeavor to figure out the independent role of the sensible in causing changes and motions, cf. Prince, 2014.

3.2 Intellect, Proportion and the Persuasion

Timaeus says the Necessity serves only as the auxiliary cause in the generation of all things (46c-e), implying that the Necessity alone is insufficient to lead to the generation. As we analyze above, the Necessity does initiate the disorderly motion of the elements and other sensible things. However, Plato appears not to regard such sort of motion as generation. The genuine generation, according to the text, is a process where the sensible is guided to come to be towards what is good, under Intellect's (or the god's) persuasion through the introduction of ratio into the irregular sensible world.

At the outset of Timaeus' speech, he draws a sharp distinction between being and becoming (27d-28a). Though this distinction is not strictly obeyed in his following argument—the Receptacle, for instance, does not fit neatly into either category, and the immortal soul created by the god also challenges this dichotomy, it underscores a fundamental principle that "everything that comes to be must of necessity come to be by the agency of some cause (πᾶν δὲ αὖ τὸ γιγνόμενον ὑπ᾽ αἰτίου τινὸς ἐξ ἀνάγκης γίγνεσθαι), for it is impossible for anything to come to be without a cause" (28a4-6). The god (δημιουργός), then, is the cause of the generation of this universe, using the being as his model to reproduce the form and character of the universe (28a-b; 28c-29a).

Then, the generation of the universe under the guidance of god(s), along with the sensible contained within, is a process from disorder to order and good. Timaeus says, "[t]he god wanted everything to be good and nothing to be bad so far as that was possible, and so he took over all that was visible—not at rest but in discordant and disorderly motion—and brought

it from a state of disorder to one of order (τάξις), because he believed that order was in every way better than disorder." (30a2-6, also cf. 46c-e; 47e-48b) Plato thereby suggests that the disordered sensible is bad while the ordered things are good, and the becoming from the former to the latter is regarded as a generation.

And eventually, Timaeus reveals that god caused these generations by introducing ratio as the order. He claims that in the pre-cosmic phase, the primary elements are utterly disordered due to their lack of proportion and measure. Considering this situation, the god introduces order into them by endowing them with forms and numbers to make distinctive shapes (53a-b). And this is precisely the generation of elements as well as the entire universe. As Timaeus concludes,

> "To repeat what was said at the outset, the things we see were in a condition of disorderliness when the god introduced as much proportionality into them and in as many ways—making each thing proportional both to itself and to other things—as was possible for making them be commensurable and proportionate. For at the time they had no proportionality at all, except by chance, nor did any of them qualify at all for the names we now use to name them, names like fire, water, etc." (69b2-8)

Therefore, in this dialogue, the generation is the process wherein god(s) infuses the proportion into the relatively disordered things, thereby making the latter become better and more ordered. Plato does acknowledge that the sensible may occasionally acquire some orders by

themselves, but he views such occurrences as rare and inconsequential. Timaeus enumerates large amounts of such mathematical proportions or ratios. For instance, he claims that the god creates the body of the universe by integrating the four elements with the specific proportions, resulting in a body with a symphony of proportion, in which four elements come together into a bound unity that cannot be undone by anyone but the god (31b-32c). Additionally, the generation of the soul of the universe involves the god's introducing a notoriously complicated proportion into the mixture of the Being, the Same and the Difference (34b-36d). Moreover, as we have mentioned above, the generations of the four elements also rely on the combination of triangles according to their proportions respectively. These proportions, in turn, allow for the elements' mutual transformation (54d-55c; 56c-57c).

From Plato's perspective, those generations, being caused by the god(s), indicate that the sensible is crafted by Intellect. And such sort of change is not arbitrarily imposed on the disorderly by the Intellect. For he says, "Intellect prevailed over Necessity by persuading it to direct most of the things that come to be toward what is best, and the result of this subjugation of Necessity to wise persuasion was the initial formation of this universe" (48a2-5). Thus, during the generative change, the Intellect is not irreconcilably opposed to the Necessity and the character of the sensible. Instead, the Intellect improves and refines the sensible and makes them better by introducing a measure which is appropriate for them respectively. For instance, as we have cited above, prior to the generation of the cosmos, the primary bodies have already possessed some certain traces of the fire, air, water and earth. And the god fashions

them to be perfect and excellent by providing mathematical proportions to each of them (52a-c).

And the combination of Intellect and Necessity, in turn, leads to various motions and changes of things within this universe. Influenced by the persuasion of the god(s), these entities move in a more or less regular way, especially when compared with the disorderly motion driven solely by the Necessity. The Intellect guides them to move and change in the best and most understandable way they can. After forming the body of the universe by bounding the elements in a perfect proportion, the god bestows upon it the most fitting movement—that is, the rotation, which is associated with understanding and prevents the universe from aimless and disorderly wandering (34a). Similarly, the Demiurge provides well-rounded stars, which are the minor gods and resemble the universe, with two movements: rotation and revolution (40a-b). On the contrary, the souls of human beings are endowed with movements in six different directions, for this sort of soul is most miscellaneous and thus suitable for disorderly motions (43a-b).

3.3 The Universe in Constant Changes and Motions

We are now able to summarize Plato's theory of change and motion as presented in the *Timaeus*. The dialogue illustrates a universe replete with all kinds of motions. As we have seen, in the phase of pre-cosmos, the primary bodies, together with the Receptacle, are in a state of constant and disordered movement. Then, during and after the creation of the universe, various motions occur: the body of the universe rotates ceaselessly (34a); and concerning the soul of the universe, the outer part possesses the revolution of the Same, revolving toward the right by way

of the side, while the inner of the Different revolves toward the left by way of the diagonal (36c-d); the stars move in their orbits (38c-40b); the souls of human beings, though possessing regular revolution by their own nature, may move disorderly and in an irrational way, together with their bodies, toward all six directions (43a-44d); the bodies of human beings, obviously, are able to act and move (44d-45b); the sight of eye is also based on the internal fire flowing through this organ and striking the external object (45b-46a); the elements never cease to transform into each other and move toward their own regions (58a); and the varieties of these elements also countless sorts of changes and motions (58c-61c). And these physical movements help to explain the feelings and perceptions of human beings, including pleasure and pain (64a-65b); tasting (65b-66c); smelling (66d-67a); hearing (67b-67c) and seeing (67c-68d). Timaeus also provides a lengthy and detailed discussion on the tremendous motions and changes of the embodied soul and physical body (69c ff.)

Thus, we must admit that Timaeus' universe is in a state of constant and total flux. It may remind us of Plato's discussion of the flux that the sensible is always changing generatively in the *Cratylus*, the *Symposium*, the *Phaedo* and other middle dialogues which reflect Plato's first model of change and motion. But here, Plato reveals a different picture. As we have argued, according to the first model, the sensible is always undergoing generative changes by participating in a corresponding Form. At the same time, motion unrelated to acquiring or losing a property and the corresponding Form is deemed non-generative, including spatial motion and the movement of the soul. However, in the *Timaeus*, Plato presents a divergent view. His conception of change and motion differs from the earlier model in the following aspects.

Firstly, in the *Timaeus*, acquiring some certain property or characteristic is no longer necessarily signifying a generation, and such changes are not exclusively caused by participating in a Form. As we have said, prior to the creation of the universe, the primary bodies are constantly moving disorderly, capable of transforming into each other due to their own nature, independent of any shaping by Forms. These changes, though resulting in the acquisition of various properties, are still caused by the sensible themselves, disconnected from any Form. They are not considered genuine generations since, at this stage, the god has not yet instilled proportion and order. And this type of disorderly change also persists after the generation of the universe.

Secondly and relatedly, the definition of generation in the *Timaeus* markedly differs from that in the first model. According to Plato's earlier model, as we have argued, a sensible thing generatively becomes *F* if and only if it participates in the corresponding Form *F*-ness. In contrast, the generation in Timaeus diverges in two ways. In the first model, the focus of change in the process of generation is on the property or characteristic, such as becoming hot or cold, large or small. But here in the *Timaeus*, the product of generation is nothing but concrete things, especially the elements and their variants. And besides, in the *Phaedo*, when a sensible thing *x* participates in a Form *F*-ness, an *F*-ness-in-*x* enters into *x*. But in the *Timaeus*, what enters into the sensible, being introduced by the god(s), is the mathematical proportion.

Thirdly, the role of the soul affecting changes and motions appears to be distinct. In the middle dialogues and Plato's first model, though the soul

is said to be the cause of all motions and generations, he never clarifies how the soul makes that happen, particularly in light of the fact that Form is also emphasized to be the cause of change. However, in the *Timaeus*, as we have argued above, the god(s) is the primary and most critical reason for the entities' generation by introducing the order into the disorderly. And the sensible entities have their own motion due to themselves, independent of the guidance of the god(s). Timaeus acknowledges that sensible entities or bodies may sporadically achieve some order by chance without the intervention of the god(s), but this is an infrequent occurrence.

These points illustrate the foundational aspects of Plato's second model of change and motion, briefly introduced in the previous dialogues. However, there is one subtle difference between the *Timaeus* and the *Philebus* concerning the disorderly motion or the motion of the sensible due to their nature. For according to the *Philebus*, the change naturally intrinsic to the sensible is characterized as an oscillation between opposites. Such sort of change is also mentioned in the *Statesman*. Conversely, in the *Timaeus*, the disorderly motion is described as irregular spatial motion of the physical substance, which may further lead to transformations and alterations among different entities. Similarly, in the *Statesman*, the interlocutor also explores the disordered reversal of the universe without being guided by the god. Thus, there seem to be two sorts of motion unrelated to intellect. And both of them indicate the sensible's lack of identity and stability.

Beyond these differences, an important question arises whether Plato still maintains the idea that the whole universe is in some perpetual flux, as he

did in the *Phaedo*, the *Symposium*, the *Cratylus* and other middle dialogues. In the text, Timaeus argues that the sensible—such as fire or water—should be characterized as "what is such" rather than "this". For these things do not have stability, always getting away without abiding by any expression which indicts them of being stable. Thus, it would be more accurate to label them as "what is such", given that these things always come to be around what it was again and again. (49d-e) In this view, sensible fire or water, strictly speaking, are not true fire and water, for these sensible substances only come to be fire and water at some time.[259] On the contrary, the Receptacle, within which the sensible come to be and pass away, is the only thing that could be regarded as "this" and "that" in the physical world (49e-50a). Apparently, this view is distinct from the opinion represented in the *Theaetetus*. As we have seen, in the *Theaetetus* the flux has to become so extreme that even "what is such" is deemed untenable and we can only say "not at all thus" (*Theaet.* 183a-b).

Thus, the prevalent view posits that Plato, having already rejected the extreme flux in the *Theaetetus*, now endorses some sort of moderate flux that the sensible is not always changing or not changing in all aspects. The perspective seems to be supported by the *Timaeus*. Kahn, as a representative of this reading, argues that both the *Cratylus* and the *Theaetetus* have established the point that successful reference ("this", *toute* or *tode*) and description ("such", *toiouto*) of something require some degree of stability in this object. And the *Timaeus*' argument is

[259] Indeed, there are two different readings on "this" and "such". The traditional view maintains, here the interlocutor claims that we should not call fire or water the phenomena "this" but "what is such". Cf. Cornford, 1937: 178-180; Zeyl, 1975. Cherniss provides an alternative, arguing that "fire" and "water" are not to be applied to phenomena at all, but "distinct and self-identical characteristics". Thus, we should not characterize fire or water as "this", but "what is such". Cf. Cherniss, 1954.

thought to provide an ontological foundation for those semantic analyses. He says, "[i]n the new account of flux in the *Timaeus* the basis for reference is provided by the Receptacle, as the only fully stable object in the realm of Becoming and hence the only true reference for the indexical 'this'. (50a) On the other hand, description…relies on the dual role of the Forms as the source for objective structure and hence also as the basis for descriptive speech. Phenomena can be identified or picked out by reference to portions of the 'this', that is to say, a location in the Receptacle."[260] In short, the Receptacle provides the "this" through location and the Form provides the "such" for a sensible object, enabling it to be referenced and described in the flowing world.

However, a closer examination of the text suggests that Kahn's reading, as well as the view of alleged moderate flux behind, may not be fully substantiated. Timaeus does not argue that the Receptacle, as the only changeless thing in the universe, is a constituent of the sensible thing. Rather, he just aims to emphasize that the Receptacle undergoes no generation, never departing from its own character in any way (50b).[261] If so, it is doubtful how the Receptacle can help to refer to the physical things if it is even not part of them. Further, considering a sensible thing which is moving spatially, the Receptacle either moves with it as its component, or this object moves through various parts or pieces of the Receptacle. Concerning the former case, the interlocutor never suggests that the Receptacle can move in this way. And if the latter is closer to Plato's view, the Receptacle cannot be used to reliably reference a moving sensible thing, as the Receptacle where it is located in each

[260] Kahn, 2014: 188.
[261] Cf. Gill, 1986: 45-47.

moment is also constantly altering. Consequently, Kahn's thought appears to be hardly tenable.

Indeed, Plato shows no endeavour to "moderate" the phenomena of flux in this dialogue. As we have said, he continues to portray a world where every sensible thing is in constant changes and motions. So why can Timaeus legitimately refer to physical things as "what is such" amidst such flux? While the majority tends to interpret this as Plato advocating a moderate flux rather than an extreme one, we propose an alternative explanation. We disagree with such a turn of Plato's understanding of flux phenomena and would prefer the explanation that it is because, after the subtle ontological arguments in the *Sophist*, the motion is able to combine with rest. As we have discussed in the previous sections (pp. 101-102), in the *Theaetetus*, Socrates claims that if everything is really in extreme flux, then we are unable to say anything is "thus" (οὕτως) or "not thus". Namely, we cannot make any meaningful description of a changing thing. And this impossibility of language relies on the ontological premise that motion and change is completely incompatible with rest and identity. However, this impossibility has been refuted in the *Sophist*, since in this dialogue it is aruged that all kinds can move by combining with Motion without undergoing a generation, indicating that motion and change is no longer incompatible with rest and identity (pp. 122-132). Thus, even within a universe characterized by extreme flux, we are still capable of referring to sensible beings by regarding them as "what is such". In the *Timaeus*, although the interlocutor still admit that the elements and sensible things always change and have no stability, he allow us to speak of fire, water or other things as "what is such" (49b-50a). Accordingly,

even if something, say fire, is always changing, it does become fire and hence is qualified to be called "(such) fire".

In conclusion, through Timaeus' myth of the universe's generation, Plato depicts a world engulfed in change. Within the framework of his second model of change and motion, the primary bodies and the Receptacle are able to move due to their own nature, and the sensible even possess some certain tendency to move by their necessity after the generation of the cosmos. Further, this is only the auxiliary cause of generation. The Intellect or the god(s) serve as the primary one by introducing the order or mathematical proportion—looking at the eternal Form as the model—into the disordered and inanimate bodies, making the latter become good. This is the process of generation of the universe and all within in. Nevertheless, in the *Timaeus*, Plato confines his discussion to cosmogony, with plans to expand upon this theory to cosmology in his final dialogue, the *Laws*.

4. Plato's Final Discussion of Motion in the *Laws* X

In the tenth book of the *Laws,* known as his final monograph, Plato presents his ultimate exposition on change and motion. The Athenian elaborates on ten kinds of motions and delineates their sequence. Through these arguments, the interlocutor tries to demonstrate that the self-moving soul is the origin of all other motions and changes, in order to affirm the existence of gods and counter the atheistic view that the soul merely emerges from the natural substance and the gods are merely the artificial products of the conventions.

This text is undoubtedly an extension of Plato's renowned argument regarding the soul's self-motion in the *Phaedrus* which we have discussed in the previous chapter (pp. 74-80). And also, it presents certain key aspects of Plato's second model. Especially, it continues Timaeus' discussion concerning the role of Intellect in causing changes of the physical things.

4.1 Nature, Soul and the Cause of Generation

In this text, the Athenian sketches out the atheists' picture of the cosmos which asserts that the whole universe comes to be by chance and random motions of the material substance without any guidance from the god or other souls. This picture, apparently, stands in stark contrast to the cosmogony narrative presented in the *Timaeus*. The Athenian expresses concern that such atheistic view could undermine their legislative work and corrupt the political life of the citizens.

More specifically. The Athenian first addresses the natural philosophy foundation of atheism. According to this viewpoint, all things that come to be must become either by nature, by art, or by chance (τὰ μὲν φύσει, τὰ δὲ τέχνῃ, τὰ δὲ διὰ τύχην, *Laws* 888e5-6). Then, the cause of the greatest and finest natural thing is not intelligent planning but nature and chance (889c). The atheists may claim, that the oldest things—namely the elements fire, water, earth and air—come to be by nature and chance without the participation of art or design of the intellect (889a). These elements and substance, in turn, move irregularly being impelled by their own inherent properties—hot and cold, dry and wet, soft and hard, and all their combinations, make up the earth, sun, moon and stars (889b).

Further, the four seasons are established, leading to the appearance of plants and living creatures (889c).

On the contrary, they maintain that government and legislation result not from natural processes but are largely a matter of art which is purely the brain-child of human beings (889c, d-e). Moreover, the gods are also viewed as artificial concepts corresponding to laws and conventions rather than nature (889e). And further, goodness according to the law—such as justice—shares no natural standard, always changing and altering as entirely artificial products (889e-890a). The Athenian criticizes this perspective as the root of impiety among the young (890a). Thus, it becomes imperative to demonstrate that the whole universe is not a product of chance, but the excellent leading of the soul. This understanding is crucial for validating that the law, though legislated by human beings, is part of nature or the creation of reason (890d), and thereby ensuring the establishment of prudent law and political order (890e-891a).

It is not difficult to realize that the cornerstone of this atheistic view lies in its concept of ‘nature’. According to the Athenian’s exposition, this concept encompasses three basic meanings within the atheistic theory. Firstly, ‘nature’ is seen as antithetical to intellect, implying that what is called a “natural thing” is something that has never been disturbed and acted upon by any soul. Secondly, it is viewed as the opposite of the convention, as the atheists explicitly regard convention as nothing but an artificial product. And lastly, ‘nature’ is a process through which the primary substances—fire, water, air and earth—were created (892c). Based on this rationale, natural things are considered devoid of soulful

influence. Consequently, the primary substances as the oldest things belong to nature, and the soul itself is merely the byproduct of these substances' random motion.

However, the Athenian argues that if the older one thing is, the more qualified it is to be called "natural", then the soul must be the most proper candidate of "nature", for the soul is precisely the first creation. All other inanimate things come to be subsequent to the soul, changing and generating under its activity. The interlocutor asserts,

> "Well then, the doctrine which produces an impious soul also 'produces', in a sense, the soul itself, in that it denies the priority of **what was in fact the first cause of the generation (γένεσις) and destruction (φθορά) of all things**, and regards it as a later creation. Conversely, it asserts that what actually came later, came first. That's the source of the mistake these people have made about the real nature of the gods…It's the soul, my good friend, that nearly everybody seems to have misunderstood, not realizing its nature and power. Quite apart from the other points about it, people are particularly ignorant about its birth. **It is one of the first creations, born long before all physical things, and is the chief cause of all their alterations and changes-of-order**." (891e5-892a7)

Currently, the Athenian's approach aligns with the arguments presented in the *Timaeus* in at least two key aspects. Firstly, unlike the *Phaedrus*, the *Phaedo* and other middle dialogues in which Plato tends to describe the soul as eternal without any generation and destruction, here the Athenian

clearly emphasizes that the soul has birth and beginning as "the first creations" long before the generation of all physical things. This idea can also be found in the *Timaeus* where the process of the soul's birth is discussed at length. Secondly and more crucially, the Athenian's view of the soul clearly echoes the *Timaeus*' analysis of the role played by the god(s) in the cosmogony, arguing that the soul causes all other changes and generations by introducing some certain orders into the material.

As we have said, in the text cited above, the Athenian clearly proclaims that the soul is one of the first creations in the universe, and it is the cause of generative changes of all physical things. What are these generative changes? The Athenian may suggest his understanding by using the terms 'alteration' (μεταβολή) and 'changes-of-order' (μετακόσμησις). The latter term, being relatively rare, has spurred debate among scholars regarding its meaning and translation, as Plato does not offer an explicit context for its usage. According to the *LSJ*, it means "new arrangement, change of condition". Translators like Bury interpret it as 'modification', and Griffith as 'reconfiguration', while both Saunders and Mayhew opt for 'transformation', and Pangle follow Jowett's 'transposition'.[262] It seems that some translators are inclined to view 'μετακόσμησις' as a synonym for 'μεταβολή' in terms of 'alteration' or a change of some properties or shapes. Contrarily, some others, possibly influenced by the Athenian's emphasis on locomotion in the ten kinds of motion in the following text, seemly prefer to understand it as a change in position or even location. Perhaps it might be better to interpret it as 'a change of order or arrangement', considering that 'κόσμησις', its stem, is clearly used to

[262] Bury, 1967 & 1968. Saunders, in Cooper, 1997. Schofield & Griffith, 2016. Mayhew, 2008. Pangle, 1980.

mean ‘order’ or ‘arrangement’ in the *Critias* and the *Gorgias*.[263] The Athenian likely implies that the soul is able to arrange the material things and offer them an order by using this infrequent term. Therefore, the soul’s introduction of order into the physical things causes their changes, which can be deemed generative.

This point closely resonates with the work of god(s) in the *Timaeus*, where the god(s) creates the universe by introducing order into the inanimate things. In this way, the god gives rise to stars and seasons in the universe. Here, when the atheists claim that the stars and seasons come to be purely by chance and devoid of any intelligent planning, the Athenian counters by asserting that the entire cosmos is meticulously ordered by souls. And this understanding is not only limited to the god(s), but also extends to the souls of human beings as well. When he says “[o]pinion, diligence, reason, art and law will be prior to roughness and smoothness, heaviness and lightness” (892b3-5), the Athenian indicates that the souls—both of the gods and human beings—impart ordered characteristics to physical entities as a form of art (892b).

4.2 Ten Kinds of Motions

The Athenian proceeded to elaborate on all ten kinds of motions, illustrating how the self-motion of the soul, as the primary motion, instigates all other motions and generations. He first enumerates eight types of bodily motions. The first two of these are:

---

[263] At *Critias* 117b, “τὸ πρόσφορον τῆς κοσμήσεως ἑκάστοις ἀπονέμοντες”. At *Gorgias* 504b-c, “τί οὖν ὄνομά ἐστιν ἐν τῷ σώματι τῷ ἐκ τῆς τάξεώς τε καὶ τοῦ κόσμου γιγνομένῳ;”, and “τί δὲ αὖ τῷ ἐν τῇ ψυχῇ ἐγγιγνομένῳ ἐκ τῆς τάξεως καὶ τοῦ κόσμου;”.

> "Suppose someone asks, 'Sir, do all things stand still, and does nothing move? Or is precisely the opposite true? Or do some things move, while others are motionless?' My reply will be 'I suppose some move and others remain at rest.' 'So surely there must be some space in which the stationary objects remain at rest, and those in motion move?' 'Of course.' 'Some of them, presumably, will do so in one location, others in several?' 'Do you mean', we shall reply, 'that "**moving in one location**" is the action of objects which are able to keep their centres immobile? For instance, there are circles which are said to "stay put" even though **as a whole they are revolving**.' 'Yes.' 'And we appreciate that when a disk revolves like that, points near and far from the centre describe circles of different radii at the same time; their motion varies according to these radii and is proportionately quick or slow. This motion gives rise to all sorts of wonderful phenomena, because these points simultaneously traverse circles of large and small circumference at proportionately high or low speeds—an effect one might have expected to be impossible.' 'You're quite right.' '**When you speak of motion in many locations I suppose you're referring to objects that are always leaving one spot and moving on to another**. Sometimes their motion involves only one point of contact with their successive situations, sometimes several, as in rolling.'" (893b6-e1)

In his exposition, the Athenian identifies two kinds of motions as the first among the eight, rotation and locomotion—both of which fall under the category of spatial motion. This classification precisely echoes the similar

classification of spatial motion at *Theaetetus* 181c in which Socrates also differentiates spatial motion into rotation and other forms of locomotion. But unlike the *Theaetetus,* here the Athenian further suggests that these two types of spatial motion precede the other six motions in the sequence of all motions. As Parry claims, "locomotion is the basic motion from which flow combination, increase, and generation. As well, locomotion gives rise to splitting apart, decrease, and decay. Clearly, locomotion is the first in a causal series; it is the motion that gives rise to the other kinds of motion. Locomotion and rotation are spatial—motion from place to place and motion in place, respectively. Since locomotion is spatial, and since locomotion causes the other motions—besides rotation—it follows that the cause of the other motions is spatial motion—motion from place to place.'[264] Parry's assessment is certainly accurate. However, we should not overestimate the importance of spatial motion in the *Laws*, as it represents merely an intermediate stage in the sequence of ten motions, with the soul remaining the primary cause of alterations. The Athenian continues:

> "'From time to time objects meet; a moving one colliding with a stationary one disintegrates, but if it meets other objects travelling in the opposite direction they coalesce into a single intermediate substance, half one and half the other.' 'Yes, I agree with your statement of the case.' 'Further, such **combination** leads to an **increase** in bulk, while their **separation** leads to **diminution**—so long as the existing states of the objects remain unimpaired; but if either combination or separation entails the abolition of the existing state, the objects

[264] Parry, 2002: 292.

> concerned are **destroyed**. Now, what conditions are always present when anything is produced? Clearly, an initial principle grows and reaches the second stage and then the third stage out of the second, finally (at the third stage) presenting percipient beings with something to perceive. This then is **the process of change and alteration to which everything owes its birth**. A thing exists as such so long as it is stable, but when it changes its essential state it is completely destroyed.'" (893e1-894a8)

In this text, the Athenian outlines six motions in addition to the two initial spatial motions of rotation and locomotion. These six motions are combination and separation, increase and diminution, generation and destruction. And the list is reiterated at 894c. As Parry points out, they are derived from the first two spatial motions. The spatial motions of things cause combination, and the latter subsequently leads to increase or generation—if the 'state' (ἕξις) of the object remains, it would only cause an increase, while if not, then it would result in a generation. And when the object occurs a generation, itself is destroyed at the same time. Conversely, the separation of objects will lead to diminution when, again, the state remains in this process. Otherwise, it would also be generation and destruction. However, again, we should not conclude that locomotion is the basic and first bodily motion, as we will soon see.

Then, how does generation or destruction happen in this process? The author outlines a somewhat vague three-stage process. So what do these critical 'first' 'second' and 'third' stages mean? Two main interpretations are provided by scholars. Mayhew suggests that this text is not describing the process of the generation of living things, but rather the generation of

physical entities.[265] And as he reports, the majority further consider the three-stage process as "some sort of Pythagorean generation of physical reality ultimately from numbers and other mathematical entities". Namely, the first stage of change involves a point becoming a line. And the second change is the process that the line becomes a plane. Finally, the third change shows how the plane becomes a solid perceivable to us.[266] He also provides an alternative interpretation that the process is not a set of Pythagorean changes, but the generation of four elements as Plato describes in the *Timaeus*. Namely, at the first stage, the 'principles' isosceles triangles and scalene triangles come to be squares and equilateral triangles, the latter in turn become cubes, octahedrons, tetrahedrons and icosahedrons in the second stage, and eventually, in the third stage these solids make up earth, air, fire and water. [267]

Unfortunately, neither of them seems to align with the context of the dialogue. In this dialogue, the Athenian's intent in sketching out the three stages is to interpret the generation of things when they fail to maintain their "states" during combination and getting larger (893e6-894a1). And such a combination, as just described by the Athenian, occurs when one object and another move in the opposite direction and coalesce into a single intermediate substance. And this new substance is half one and half the other (893e1-5). Obviously, neither of those two interpretations satisfactorily addresses the requirement that the final production of such change is "half one and half the other" of the original substances. Because they both merely focus on the generation process of the substance from the most microcosmic units, but what actually concerns

[265] Mayhew, 2008: 113-114.
[266] Mayhew, 2008: 114. He recites England, 1921 and Skemp, 1942.
[267] Mayhew, 2008:.115-116.

the interlocutor here is how could a new substance come to be from the impact and combination caused by the movements of two original entities—both microcosmic and macroscopical.

The Athenian's actual perspective, indeed, may have already been inferred from the list of motions. The six motions, besides rotation and locomotion, are grouped into three pairs: combination and separation, increase and diminution, generation and destruction. These three pairs represent the three stages of a generative process. Thus, in the first stage of generation, due to the spatial movement, one object is struck by another and they combine with each other. And then, this leads to the second stage, where the mixed substance increases and gets larger. If the original object still remains in its essential "state", it is deemed "unaltered" by the interlocutor. But if this "state" has been changed, the third stage is initiated, producing a new substance which is perceptible to the observers. This is the whole physical process of generation. And if our previous analysis of the Athenian's understanding of generation is correct, such generation is essentially the object's change of order. In a process of change, if the original object has been altered a lot, failing to maintain its former order and "state", then it undergoes a generation, acquiring a fresh order, and is perceived by the observer as a new thing.

Nonetheless, such a process of generation cannot occur spontaneously, as the substance itself lacks a fundamental and intrinsic power to initiate the whole process. This critical power is introduced in the Athenian's following discussion of the remaining two sorts of motions:

"So, my friends, haven't we now classified and numbered all

> forms of motion, except two? … **The one kind of motion is that which is permanently capable of moving other things but not itself; the other is permanently capable of moving both itself and other things** by processes of combination and separation, increase and diminution, generation and destruction…So we shall put **ninth the kind which always imparts motion to something else and is itself changed by another thing**. **Then there's a motion that moves both itself and other things, suitable for all active and passive processes and accurately termed the source of change and motion in all things that exist**. I suppose we'll call that the tenth…Now which of our (roughly) ten motions should we be justified in singling out as the most powerful and radically effective? … It wasn't quite right to call that motion the 'tenth'…It can be shown to be first, in ancestry as well as in power; the next kind—although oddly enough a moment ago we called it 'ninth'—we'll put second." (894a8-e2)

Thus, in this text, the Athenian discusses two sorts of motions capable of moving other things. The ninth motion is described as having the ability to move others but not itself, while the tenth is capable of moving both itself and other things. Given that these two motions are able to result in other forms of motion, the Athenian then revises the sequence, putting the ninth motion in the second position and the tenth at the first. Regarding the relationship between these two motions and the remaining eight motions, there are two possible readings. Post claims that the first two motions are 'psychic' and the other eight are somatic. Skemp and Mayhew, providing an alternative interpretation, propose that the second

motion acts as a 'genus', with the subsequent eight serving as its 'species'. For all these eight motions can cause motions of others but cannot move themselves, in agreement with the Athenian's description of the ninth kind of motion.[268]

No matter which understanding is more reasonable, it is explicit that self-motion must be the very origin of all other motions. And to be clear, self-motion does not necessarily directly cause all other motions, rather, it results in most motions and changes through long or short mechanical chains. As it is shown in the generative process, for instance, the generation, though eventually caused by self-motion, is not directly caused by some sort of self-motion. Instead, it is precipitated by some certain increase, which in turn is driven by the combination. Furthermore, the Athenian posits that self-generated motion is the primary principle that initiates the entire sequence of movement. In this sequence, one thing sets itself moving and affects an alteration in another, which then affects something else, so the motion is transmitted to thousands of things one after one (894e-895a).

4.3 Soul's Self-Motion as the Origin of All Motions

Such self-motion is undoubtedly the motion of the soul. The Athenian continues to argue that, supposed all things are at a standstill, nothing can raise a motion except the self-mover. Then the self-motion must be the first motion and the source of all motions (895a-b). Then, an object made of earth, water, fire or their combinations can only be self-generated if it is "alive", and something alive definitely possessing a soul (895c). Hence, the soul is identified as the sole agent of self-motion. As the interlocutor

[268] Mayhew, 2008: 117. And he cites Post, Skemp, Lewis and Stalley.

claims, the soul is "identical with the original source of the generation and motion of all past, present and future things and their contraries" (896a6-8). From this premise, the soul, as the source of all motions, is thus the most ancient thing (896b).

The questions then arise: what is the self-motion of the soul? And how could the soul, through its self-motion, generate all other motions? Moreover, how does this understanding of the self-motion soul rebut the atheism theory? The Athenian claims,

> "So soul, by virtue of its own motions, stirs into movement everything in the heavens and on earth and in the sea. The names of the motions of soul are: **wish, reflection, diligence, counsel, opinion true and false, joy and grief, cheerfulness and fear, love and hate**. Soul also uses all related or initiating motions which take over the secondary movements of matter and stimulate everything to increase or diminish, separate or combine, with the accompanying heat and cold, heaviness and lightness, roughness and smoothness, white and black, bitter and sweet." (896e8-897b1)

These motions, representing the intellectual activities of the soul, serve as the first and chief cause of all other motions. Just as the famous example Socrates provides in the *Phaedo*, where he posits that it is his will, rather than the muscles and bones of his body, that ultimately determines whether to escape or remain in prison. Such activities of the soul initiate lengthy chains of the movements of all other things, transmitting motions one after another and resulting in all sorts of changes and generations.

And further, the Athenian suggests that such a process is accomplished by the soul's introducing some order or character into the objects. He says, "habits, customs, will, calculations, right opinion, diligence and memory will be prior creations to material length, breadth, depth and strength" (896c9-d2), implying that only by the endeavour of the soul can the physical thing acquire some certain properties and forms. Due to the same principle, the soul also causes things to become good and evil, beauty and ugliness, justice and injustice (896d5-8).[269] Accordingly, those great motions of this universe—including the change of reasons, the wandering of the stars, and all such phenomena—are directed by the souls and gods (897b-899d). In this manner, the soul is affirmed to be the first creation, and the whole universe, by its nature, is steered by intelligence, hence the atheism theory is refused (899c-d).

Therefore, as we said, these arguments expand upon the self-moving soul theory in the Palinode of *Phaedrus* (*Phaedrus*, 245c-246a) and the analysis of god(s)' role and activity in the *Timaeus*. On the one hand, the *Laws*, as a continuation of the self-motion theory in the *Phaedrus*, not only emphasizes the soul as the cause of all motions like the *Phaedrus*, but also employs a similar methodology to substantiate this claim. In the *Phaedrus*, Socrates asserts that "anything that has a beginning comes from some source, but there is no source for this (self-mover), **since a source that got its start from something else would no longer be the**

[269] It is not clear whether the soul causes the evil, ugliness and injustice and other negative changes by generation or destruction, namely, by providing a negative order to the objects or depriving a positive order from them. As we have seen, in the *Philebus* and the *Timaeus*, the generation is closely combined with good and positive values. But here, Plato does not clarify whether he still insists this view in these cases.

source". And he immediately continues to claim that "if a source were destroyed it could never get started again from anything else and **nothing else could get started from it**". Such an approach is explicitly close to the Athenian's argument that self-motion is the origin of all motions in the *Laws*. On the other hand, as we just revealed, the way the Athenian describes how the self-moving soul generates all other motions echoes the method in the *Timaeus* where the god(s) introduces some certain order or character into the other substances.

However, one may doubt that the theory of soul in the *Laws* dramatically conflicts with the *Timaeus* and some other later dialogues which are widely believed to have been written around the same time as the *Laws*. This view, from our perspective, seems to be untenable. According to them, in the *Timaeus*, firstly, the soul is not portrayed as the source and cause of all motion.[270] On the contrary, Timaeus only considers the Demiurge and gods, rather than all souls, as the cause of becoming and passing away of everything.[271] Secondly, he does not require the Demiurge or soul to be the cause of *all* motions, but specifically the generation of the world (*Tim.* 27c ff.). Notably, the Demiurge is not the cause of disordered motion. The disordered motion existed prior to the Demiurge's introduction of order and hierarchy into the cosmos (28a-30a). And as we have discussed in the previous sections, the disorderly motion

---

[270] Cf. Vlastos, 1995. Some scholars still insist that Timaeus does consider Soul as the cause of all motion. Such as Cornford and Cherniss. Cf. Cornford, 1937; Cherniss, 1954.

[271] That is the reason why Robinson holds that the *Timaeus* is completed earlier than the *Phaedrus*, for the former only leaves the Demiurge to serve as the cause of things while the latter claims the soul to be the source of all motion. He asserts the former is a small-scale experiment and a preparation for the novel and unfamiliar principle shown in the latter text. Cf. Robinson, 1992: 28-9.

seems to arise from the "Necessity" of sensible things rather, not from any soul (57e ff.). That is to say, the existence of disordered motion suggests that in the *Timaeus*, the soul and even the Demiurge are not the cause of all motions, which is contrary to the *Laws* X.

Similarly, in the *Statesman*, the Demiurge is described as initiating and guiding the revolution of the universe. But when the Demiurge lets the cosmos go, "it revolves back in the opposite direction", and such reverse movement is said to be inborn in the universe "from necessity" (*Statesman*, 269c). Despite differences in details between the two editions of the universe creation theory of the *Timaeus* and the *Statesman*, both indicate that the universe, as well as other material things, has its own nature and corresponding motions, not completely controlled by the Demiurge and soul.

In contrast, in the *Laws*, Plato attributes all motions, either directly or indirectly, to souls. As Mohr points out, the soul in the *Laws* is omnipotent.[272] Such an idea is quite critical for the Athenian, because it guarantees the soul's precedence over all material things. However, a potential side effect of this view seems to be that the soul might be held accountable for those irregular and erratic motions. Then, we may have to assume it is the evil soul that causes the disorderly motion (897e-898d). If so, the irregular motions of the stars (if they have some irrational motions) or even the whole universe (just as the reverse revolution of the *Statesman*) could be reasonably attributed to the irrational (part of) souls, at least to their defective souls compared with the perfect and divine Demiurge. For instance, Carone claims that it is the human souls that

[272] Mohr, 1978: 573.

cause all irregular motions in the whole universe—including those of the heavenly bodies.[273]

From our perspective, such differences between the *Laws* and the *Timaeus* as well as other late dialogues are more and less superficial. It is obvious that such apparent differences largely arise because these dialogues focus on different issues and consequently narrate different stories according to their own context respectively.

In the *Timaeus*, when discussing the disordered motion, the interlocutor primarily aims at talking about the cosmogony, thus he mainly discusses the Demiurge as the cause of the cosmos' generation. Similarly, in the *Statesman* the dialogue revolves around a comparable theme. In these dialogues, Plato does not dismiss the possibility for the other souls to instigate other kinds of motion, and this issue just does not urgently concern him in these works. But in the *Laws* X, the Athenian delves more into cosmology rather than cosmogony. He tries to argue against the view of the atheists, proving that the soul, as a self-mover, is the first motion and cause of all other motion in this universe. Consequently, the discussion of the interlocutor here encompasses not just generation but a broader spectrum of motions. And at the same time, the disordered motions of the primary elements or other materials, indeed, are never mentioned in the *Laws*. For according to the *Timaeus*, only in the phase of generation of the universe does the real disorderly motion exist. In the established universe, then, although the physical things possess the tendency to move and change due to their own nature, such motions are not entirely disconnected from the god(s) and souls, since the physical

[273] Cf. Carone, 2005.

objects have already accepted the proportion and order from the god(s). Thus, it is not unreasonable for the Athenian not to consider the motion completely irrelevant to the soul in his speech.

Therefore, the *Laws* does not conflict with the *Timaeus* and other previous dialogues regarding this subject matter. It also aligns with Plato's second model of change and motion, similar to the *Timaeus*, the *Philebus* and even the *Statesman*. Like these dialogues, the *Laws*, again, proposes that the physical things undergo generative changes when they acquire some certain orders. And it underscores the soul as the ultimate cause of all motions since the self-motion of the soul is proved to be the first motion in the sequence of all ten kinds of motions.