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

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The Metamorphosis of Change:
A Study of Plato's Theory of change

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Summary

This study endeavors to reconstruct Plato's theory of change and motion, elucidating how he presents his ideas through a dialectical approach. The diverse perspectives and debates of the pre-Socratic philosophers regarding change and motion provide the context and backdrop for Plato's discourse. Three specific aspects notably influenced Plato: (1) the pattern of change between opposites, initially introduced by early Ionian philosophers such as Anaximander and Anaximenes, and later generalized by Heraclitus, who posits that everything is in a state of perpetual flux and oscillates between opposites; (2) the prominent tradition advocating the perpetual motion of the immortal soul and its capacity to initiate the motion of other entities; (3) the opposing view held by Parmenides and his Eleatic followers, who assert that What-is always remains unchanged, as any alteration or motion would imply generation. However, it becomes evident that these points are not entirely consistent with one another.

Plato tries to construct a systematic and coherent theory to integrate these insights and reconcile potential conflicts among them in his middle dialogues, including the *Cratylus*, *Symposium*, *Phaedo*, *Republic*, and *Phaedrus*. This constitutes his first theory of change and motion, wherein he aligns with the Ionian philosophers and Heraclitus by positing that the change between opposites is the fundamental pattern of alteration for sensible entities. Additionally, he adopts the Eleatic view that such changes are inherently generative. To elucidate both the mechanism of change between opposites and its generative nature, Plato introduces the concept of the Form. According to this framework, a sensible entity acquires a property *F* if and only if it participates in the corresponding

Form of *F*-ness, and such transformations between opposites are generative. Simultaneously, this theory acknowledges that certain motions, such as spatial motion and the motion of the soul, can be non-generative, as they do not involve participation in a Form. This ensures the perpetual motion of the immortal soul and its capacity to initiate motion in other entities.

The first model is immediately shown to be problematic in Plato's *Theaetetus*, *Parmenides*, and *Sophist*. Firstly, the role of the Form in the mechanism of change is questioned. It is demonstrated that the Form cannot encompass all varieties of change between opposites, as negative Forms and sensible Forms may not exist. Furthermore, participation in a Form is argued not to necessarily lead to generation. Secondly, the Parmenidean principle, which elucidates the generative nature of change, is deemed untenable, as the Form is now argued to be both *F* and not-*F*. Consequently, Plato's theory of change and motion can no longer be based on the Parmenidean principle, and its mechanism should not depend on the participation in the Form.

In the *Statesman*, *Philebus*, *Timaeus*, and *Laws* X, Plato presents his second model of change and motion. Within this framework, he underscores that sensible entities inherently possess the capacity to move and change. This motion, encompassing oscillation between opposites and irregular spatial movement, is intrinsic rather than externally induced, as proposed in the first model. Consequently, these changes are not viewed as generative processes of motion. Instead, generation occurs only when an orderly or mathematical proportion is imposed on the disorganized sensible object. This process halts the inherent disordered

motion of the object, transforming it into an ordered and good entity. Moreover, the ultimate cause of generation is attributed to the soul. Therefore, Plato offers a comprehensive account of change and motion in the universe. The world is in a constant state of flux, with all sensible and visible phenomena continuously changing and moving, driven by both inherent and external forces. It is the soul, including the gods, that introduces order and corresponding generation in the sensible world. Thus, despite its flux, the universe is meticulously guided by nous or intellectual power.

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Introduction

In Homer's epic, the *Odyssey*, during Odysseus' confinement on the island Pharos, the hero encountered Eidothea the goddess who informed him that the immortal Proteus of Egypt who was adept in metamorphosis would be able to tell him the way to leave and return home. She said,

> "When the sun hath reached mid-heaven, the unerring old man of the sea is wont to come forth from the brine at the breath of the West Wind, hidden by the dark ripple. And when he is come forth, he lies down to sleep in the hollow caves; and around him the seals, the brood of the fair daughter of the sea, sleep in a herd, coming forth from the gray water, and bitter is the smell they breathe of the depths of the sea…Now so soon as you see him laid to rest, thereafter let your hearts be filled with strength and courage, and do you hold him there despite his striving and struggling to escape. For try he will, and will assume all manner of shapes of all things that move upon the earth, and of water, and of wondrous blazing fire. Yet do ye hold him unflinchingly and grip him yet the more. But when at length of his own will he speaks and questions thee in that shape in which you saw him laid to rest, then, hero, stay thy might, and set the old man free, and ask him who of the gods is wroth with thee, and of thy return, how thou mayest go over the teeming deep."
>
> (Hom. *Od*. IV. 400-424)

Odysseus heeded her counsel and seized hold of the old god, compelling him to divulge the truth:

> "Thereat we rushed upon him with a shout, and threw our arms about him, nor did that old man forget his crafty wiles. Nay, at the first he turned into a bearded lion, and then into a serpent, and a leopard, and a huge boar; then he turned into flowing water, and into a tree, high and leafy; but we held on unflinchingly with steadfast heart. But when at last that old man, skilled in wizard arts, grew weary, then he questioned me, and spoke, and said…"
>
> (Hom. *Od*. IV. 454-461)

According to Homer's verse, despite the old sea god Proteus's attempts to elude capture by altering his appearance and assuming various forms, Odysseus ultimately apprehended him, preventing his escape. The motif of divine metamorphosis holds enduring significance in Greek mythos and literature, particularly during the classical period, a theme that notably provoked Plato's critique. In the *Republic*, Socrates vehemently denounces the metamorphosis narratives of the poets, explicitly stating, "Let no poet tell us about Proteus or Thetis" (*Rep*. 381d4). Socrates contends that such stories portray the gods as sorcerers, appearing in different forms at different times and changing themselves from their own forms into many shapes, an implausible notion (380c-d). Because it seems that a god and what belongs to it, being in the best and most unchanging state possible, cannot undergo metamorphosis into something inferior (381b-c). Thus, Socrates asserts that "they are the most beautiful

and best possible…each always and unconditionally retains his own shape." (381c7-8)

Why is Plato so discontent with the poet's metamorphosis story of Proteus and other gods? The direct reason, explicitly, should be the role of mythos in shaping the education and moral development of the citizenry. As Socrates contends, poetry plays a crucial role in shaping the souls of children, and false narratives, such as those depicting divine metamorphosis, can have detrimental effects on the moral fabric of the guardians of the city-state (376e-377c). This concern, along with Socrates' philosophical arguments against the metamorphosis of gods, relies on an ontological insight that will be further explored in this work. From Socrates' perspective, the idea of divine metamorphosis undermines the perfect nature of the gods, suggesting a fundamental logical incompatibility between change and identity.

This assumption, while not necessarily Plato's final conclusion, reveals the primary ontological challenge he grapples with in his examination of change and motion. Plato, through Socrates, divides previous philosophers into two opposing camps. In the *Theaetetus*, it is asserted that Homer and all other wise men with the exception of Parmenides advocate that everything is coming to be and nothing ever is (*Theaet*. 152d-e). And in the *Sophist*, the Eleatic Stranger further claims that those people drag "everything down to earth from the heavenly region of the invisible, actually clutching rocks and trees with their hand. When they take hold of all these things they insist that only what offers tangible contact is, since they define being as the same as body." (*Soph*. 246a8-b1) On the contrary, Parmenides and his followers, as the second group

philosophers under Plato's narrative, claim that all things are One that stands still and avoids any movement (*Theaet*. 180e). And furthermore, in the *Sophist*, the alleged Friends of Form insist that the authentic Being must be nonbodily Forms as the objects of thought, and they take the other group's notion of being as merely a process of becoming (*Soph*. 246b-c).

It is reasonable to deduct that, within this framework of the intellectual battle between these two groups, Homer may be deemed by Parmenides or Socrates in the *Republic*, as a crappy philosopher, blurring the distinction between becoming and being, and compelling Odysseus to grasp the altering god by his own hands. Indeed, according to their view, if the beings were truly in such a perpetual and extreme flux, they would not be able to be grasped at all. Because having obeyed this flux doctrine strictly, the changing thing would always slip away and cannot be applied (*Theaet*. 182d). Thus, in the case of Odysseus, he would not have been able to grasp the metamorphosizing Proteus, as within the flux doctrine the object of his grasp would continuously slip away.

Plato's engagement in this debate is motivated not solely by metaphysical and theoretical curiosity, but also by practical and urgent concerns arising from the tumultuous political climate of his era. The precarious political circumstances necessitate a serious examination of this issue. As Socrates notes in the *Theaetetus*, the doctrine of flux propagated by Homer, Heraclitus, and other philosophers serves as the foundation for Sophists' conventionalism, particularly exemplified by Protagoras. And their theory, in turn, undermines the foundation of justice, piety and other political virtues (172a-b). The proliferation of flux doctrine and its attendant

conventionalism poses a significant threat to individual character and the hierarchical structure of Greek city-states. Plato consistently emphasizes, as evident in works such as the *Republic* and many other dialogues, that a robust political framework should be grounded in the pursuit of eternal truths and Being.

However, Plato does not unilaterally align himself with Parmenides and his adherents. While he acknowledges that true Being undergoes no generative changes leading to non-Being, he diverges from Parmenides by asserting that Being is not entirely devoid of motion. On the one hand, Plato acknowledges the inherent variability of sensible things, which are situated between true Being and non-Being, and can undergo diverse forms of change. He does not wholly dismiss the empirical observations of pre-Socratic natural philosophers regarding the flux nature of visible and material entities in the world. Yet, Plato critiques their lack of a coherent explanatory mechanism governed by nous and a comprehensive understanding of change and motion, as depicted in the *Phaedo* (*Phaed*. 95e-99d). Plato warns against the potential consequences of such a worldview, as seen in the *Laws* X, where all political and ethical constructs risk being reduced to mere products of human conventions, devoid of any natural standards. This seriously threatens the establishment of prudent legislation and political order (*Laws* 888e-891a). Therefore, a key objective of Plato's theory of motion and change is to offer a systematic and rational interpretation of the phenomena within this flux-laden world.

And further, on the other hand, diverging from Parmenides and the Eleatic philosophers, Plato suggests that even true Being, including

Forms and souls, may undergo certain changes and motions (*Soph*. 248e-249b). This leads to a logical conundrum, as Plato concurrently advocates two propositions at the same time:

I. Being always is, retaining its identity and sameness without undergoing any generative change.
II. Being possesses some certain motions.

Both propositions can trace their origins to pre-Socratic thought and potentially contradict each other within this intellectual context. As explored further in subsequent chapters, the first proposition likely stems from the legacy of Parmenides and the Eleatic tradition, asserting that What-is, the real Being, cannot be What-is-not, and even the tiniest change or motion would compel it to become What-it-not. In short, change and motion are incompatible with Being's sameness and identity. By suffering a change or motion, it must completely lose its identity and thoroughly come to be something it was not—that is, a process of generation. Apparently, this is the fundamental reason for Socrates of the *Republic* rejecting Proteus' metamorphosis story, for such alterations would force the old sea god to lose his identity, no longer being the same perfect god as he was. Conversely, the second proposition, influenced by various pre-Socratic philosophers, posits that certain entities, such as the soul and Forms, can experience motion. This raises a fundamental question: how can Being maintain its sameness and identity if it is subject to motion?

This question, as elucidated in subsequent chapters, is the core of Plato's investigation into change and motion, serving as the impetus for his

integration of the ideas of his predecessors and the formulation of diverse theories aimed at resolving this quandary. This challenge is not unique to Plato; it constitutes a fundamental issue for Empedocles, Anaxagoras, and numerous other pre-Socratic philosophers. Moreover, it remains a Gordian Knot for most theories concerning change and motion in the history of philosophy after Plato.

Among all these theories, from our perspective, the majority seem to follow one approach, which involves dissecting Being into various facets or stages to adhere to Parmenides' insight. At the outset of *On Generation and Corruption*, Aristotle announces that he is going to distinguish between generation (γένεσις) and alteration (ἀλλοίωσις).[1] He argues that Parmenides and his followers fail to differentiate between these two concepts, positing that anything undergoing alteration must also undergo generation (*GC*. 314a1-13). One of Aristotle's primary objectives in this work is to establish this distinction, as without it, entities cannot undergo change while retaining their identity. He proposes dividing Being into substratum (ὑποκείμενον) and the properties (πάθος) predicated of it. According to him, in an alteration, the substratum of the entity remains to be the same but some certain property passes away and comes to be, while within a generation, the substratum itself does not persist and the entity changes as a whole (*GC.* 319b8-18). Further, in Aristotelian terms, non-generative changes occur in the categories of quantity, quality, and space, while generative change occurs in the category of substance (*GC.* 319b31-320a2; *Phys.* 224a21-225b5). Thus, during the non-generative changes and motions, the substratum of the entity remains being the same,

[1] A detailed discussion of the distinction at this beginning, cf. Brunschwig, 2004: 31 ff.

aligning with the first proposition and reconciling with the second.

Even in contemporary philosophy, concerning this issue, Aristotle's route is still popular when addressing the persistence of entities through temporal changes. Consider this case: An entity *x* possesses a property *F* at t_1, and loses it at t_2, being not-*F*. According to everyday intuition, this entity, though undergoing a change, fully and completely exists both at t_1 and t_2. Thus, *x* endures through this period of time and the corresponding process of change. This opinion, in David Lewis' term, is called "endurantism".[2] However, some assert that this view necessarily leads to an unacceptable deduction. Namely, since based on the endurantism, the same entity *x* fully and completely exists at t_1 and t_2, it must both be *F* and not-*F*, ridiculously violating the non-contradiction law. Thus, contemporary scholars confront the same difficulty that Plato, Aristotle, and other ancient philosophers meet: The self-identity of an entity seems to be incompatible with its change. Some scholars turn to advocate an opposite standpoint, named "perdurantism". They argue that the temporal part is also the essential element of an entity's existence. Then, in the case discussed above, the entity *x* at t_1 is not numerically identical to the *x* at t_1. Hence, the *x*, strictly speaking, does not persist during this period of time and the corresponding process of change. Instead, it is an aggregation containing a series of stages that exist at different times. Therefore, each stage of *x* at every moment is able to retain its identity since it does not suffer any change, and the *x* as a whole or diachronic aggregation undergoes generations whenever it changes. Those who advocate endurantism provide a further defence of their standpoint by re-interpreting the essence of the property. From their perspective, the

[2] Lewis, 1986: 202-205.

entity x does not possess a property F, but a time-related property F-at-t. Thus, x is F-at-t_1 at t_1 and then it is not F-at-t_2 at t_2. Therefore, x can persist and retain its identity during this change, without being divided into temporal stages, for it is not self-contradicted for x to be both F-at- t_1 and not F-at- t_2.[3]

Despite their divergent approaches, both endurantism and perdurantism share a common foundational premise: the decomposition of Being to conform to Parmenides' notion that true Being must retain its identity by eschewing change and motion. Endurantism aligns with Aristotle's framework by attributing change to properties while maintaining the unchanging nature of the essential part of Being. Perdurantism, on the other hand, decomposes Being into temporal stages to ensure its self-identity and immutability at each moment. Both approaches, alongside Aristotle's pioneering work, strive to adhere to Parmenidean insights by positing that change is incompatible with the identity of Being.

Plato chooses another route. Faced with the apparent contradiction between change and the identity of an entity, he eventually gives up this Parmenidean view, allowing the Being or other entities to be both F and not-F, and to change without losing their self-identities. And his final thinking of motion and change is founded on this ontological premise. Therefore, an investigation into Plato's corresponding theory today holds significant value, not only for clarifying Plato's own perspective but also for enriching contemporary discussions on this issue.

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[3] Loux, 1998: chp. 7.

But unfortunately, unlike Aristotle, whose theory of motion has been extensively explored, there have been few studies and fewer tenable interpretations of Plato's thought of change and motion.[4] Hence, this study aims to provide an overview of Plato's theory of change and motion, encompassing his significant discussions on this topic in the middle and later dialogues. Furthermore, this study intends to cover the following topics:

1. The prevailing pre-Socratic opinions regarding change and motion before Plato might have influenced him.
2. Plato's understanding of the essence and classification of change and motion.
3. What is subject to move and change in Plato's theory, and what sorts of motion or change do they undergo?
4. What is the mechanism underlying these changes and motions?
5. What causes these changes and motions?

Obviously, Plato's narrative should be contextualized within his comprehensive exploration of change and motion. He presents his theory not as a single exposition but disperses his ideas and arguments across a series of dialogues, facilitating a dialectical progression for his audience. Regarding the debate between Unitarianism and Developmentalism interpretations of Plato, we align with the standpoint akin to Charles Kahn's. Although we acknowledge that the views presented in Platonic

[4] To date, the only comprehensive work focusing on Plato's theory of change and motion is Skemp (1942) which merely analyzes Plato's later dialogues. Additionally, Mason (2016) offers insightful discussions but focuses solely on the concepts of flux and flow in Platonic works.

works are not entirely consistent with each other, we do not posit substantial changes in Plato's theory throughout his corpus. Rather, these perspectives serve as a dialectical guide for readers to gradually apprehend the truth. As Kahn contends, Plato's primary aim "is not to assert true propositions but to alter the minds and hearts of his readers. Plato's conception of philosophical education is not to replace false doctrines with true ones but to change radically the moral and intellectual orientation of the learner, who, like prisoners in the cave, must be converted-turned around-in order to see the light."[5]

This study will outline Plato's comprehensive exploration of the theory of change and motion and delve into his efforts in subsequent chapters. As previously mentioned, pre-Socratic philosophers left a significant legacy for Plato concerning the theory of change and motion. The first chapter will examine their influence on Plato. Plato's contemplation of change and motion begins with his comprehension of the world's phenomena, deeply influenced by his predecessors. On one hand, Plato appears to agree with many pre-Socratic philosophers regarding the flux and perpetual movement of the world. The early Ionian philosophers introduced the concept of change between opposites, which Heraclitus further generalized to argue that everything is in constant flux. Additionally, there is a longstanding tradition asserting that the immortal soul is perpetually in motion. On the other hand, Parmenides and his followers' understanding of the generative nature of change also greatly inspired Plato. However, these perspectives are not naturally coherent with each other. Plato must integrate these insights into his comprehensive theory. In the second chapter, through an analysis of the

[5] Kahn, 1996: xiv-xv.

Cratylus, *Symposium*, *Phaedo*, *Republic*, and the *Phaedrus*, we seek to elucidate Plato's first model of change and motion. He initially adopts the Parmenidean principle, positing that Forms, as the true Being, undergo no change, while sensible things, in perpetual flux, lack a consistent and real identity, constantly changing generatively between opposites. Building on this premise, Plato introduces Forms to explain the mechanism of change in the sensible realm, which not only elucidates the generative nature of changes but also accounts for spatial motion and the motion of the soul as non-generative. Subsequently, in the third chapter, focusing on the *Theaetetus*, *Parmenides* and *Sophist*, Plato offers several pointed criticisms of his initial model. In these dialogues, Plato does not deny the phenomena of flux in the world but rather questions the Parmenidean principle that serves as the foundation of his initial model, as well as the role of Forms as the cause of all changes between opposites. Consequently, the Two-World theory, mechanism of change, classification of motion, the scope of Forms, and various essential aspects of the initial model are challenged. Plato introduces a new ontological principle, asserting that a Kind is able to be both *F* and not-*F*, as well as to combine with Motion—that is, to move. His subsequent theory must align with this new insight. And Plato's second model of change and motion is soon revealed in the fourth chapter, which discusses the *Statesman*, *Philebus*, *Timaeus*, *Laws* X. According to Plato's second model, represented in these dialogues, Forms are no longer considered the sole cause of change; instead, Plato emphasizes that sensible entities can move and change by their own nature. However, a sensible entity only undergoes generative change when it acquires a certain order or mathematical proportion and thus becomes good. This type of change is not caused by the inherent nature of the entity but rather by the soul or

god, serving as the ultimate and primary reason for all generations in the world. Consequently, although the universe experiences various types of motion and change at every moment, it is not disorganized, arbitrary, or random but rather orderly and rational as a whole.

Chapter I The Starting Point of Plato's Theory of Change and Its Pre-Socratic Roots

In order to reveal Plato's theory of change, we are confronted with a series of critical inquiries: How does Plato understand and use concepts related to change? What are the implications of Plato's language regarding change? Which things are mutable and immutable within Plato's framework? What are the challenges inherent in his theory of change? Undoubtedly, Plato's theory of change and motion serves as a manifestation of his perception of the world he encounters. However, it is essential not to exclusively rely on Plato's original and direct experiences of this world, as his worldview is profoundly influenced by the philosophical milieu of his time. Therefore, a comprehensive understanding of the Platonic theory of change and motion necessitates a retrospective examination of pre-Socratic philosophy so as to elucidate the starting point of Plato's theory and its philosophical background.

During the early stage of philosophy, there is a lack of a dominant and normative understanding of change. Instead, various philosophers and schools of thought formulated competing theories in response to the distinct challenges they faced and their endeavours to fathom and expound upon the world. These endeavours show the early attempts in the history of Greek philosophy to interpret the primordial phenomena of change by philosophical languages. And for all the later philosophers, the way they empirically observe the phenomena of change and motion is unavoidably influenced and shaped by the pioneers. Although Plato may not have possessed an exhaustive and precise grasp of his predecessor's philosophical doctrines, it is worthwhile to investigate the intellectual

inheritance he received from pre-Socratic philosophy regarding the concept of change, which served as the starting point for his philosophical journey.

This chapter will delve into three principal dimensions: (1) the early Ionian thinkers and their conception of change between opposites; (2) the Eleatic school's perspective on generative change; and (3) the eternal motion of the immortal soul. These dimensions collectively constitute the backdrop against which change was contemplated during Plato's era. Our objective here is not to systemically expound upon and reconstruct Plato's own theory of change in this chapter. Instead, we endeavour to elucidate the broader worldview bequeathed to Plato by these philosophical precursors—a worldview characterized by the incessant flux of the entire cosmos. On one hand, all perceptible entities undergo ceaseless oscillations between opposing states. On the other hand, the immortal soul remains in a state of perpetual motion. And influenced by Parmenides and the Eleatic school, these changes are regarded to be generative. This view, in turn, leads to an essential problem how could the being, or What-is, change? This query may also constitute the primary impetus behind the inquiries into motion and change undertaken by many Greek philosophers. Only by comprehending this overarching framework can we discern Plato's point of departure in his exploration of change and the challenges he endeavours to grapple with.

1. Early Ionian Thinkers and Change between Opposites

In the so-called Cyclical Argument of the *Phaedo*, Socrates responds to Cebes' requirement of proving that the soul still exists after death and possesses its capability and intelligence (*Phd*. 70b), positing that the soul

must go round in a circle between the living and the dead, grounded in the philosophical principle that all things come to be from their opposites. To substantiate this assertion, he argues for the general rule of change as follows:

> Do not, he said, confine yourself to humanity if you want to understand this more readily, but take all animals and all plants into account, and, in short, for all things which come to be (γίγνεσθαι), let us see whether they come to be in this way, that is, from their opposites if they have such, as the beautiful is the opposite of the ugly and the just of the unjust, and a thousand other things of the kind. Let us examine whether those that have an opposite must necessarily come to be from their opposite and from nowhere else, as for example when something comes to be larger it must necessarily become larger from having been smaller before. (*Phd*. 70d7-e8)

Socrates posits a fundamental principle that underlies the generation of all things: namely, that everything that comes to be must come from their opposites. Large from small, beautiful from ugly, just from unjust and *vice versa*. And moreover, the change between each pair of opposites is called "becoming" or "generation" (γένεσις), such as the increase or decrease between the larger and smaller (71a12-b4). Therefore, change between opposites, namely being *F* and not-*F* in a row, is regarded as a universal and necessary pattern of change for all mutable entities. This view finds further reinforcement in the *Parmenides*, in which the formulation of change articulated as follows, "Don't you in fact call getting a share of being 'coming-to-be'…And parting from being

‘ceasing-to-be’? … Indeed, the one, as it seems, when it gets and releases being, comes to be and ceases to be” (*Prm.* 156a4-5), and also, “So everything of the sort we’ve described, which is both so and not so, signifies a change” (162b10-c1).

The seemingly commonplace and unremarkable nature of this universal pattern of change may belie its significance, particularly to a modern observer. In fact, it stands as one of the foremost contributions of the early Ionian thinkers to the change theory. Our discussion will primarily revolve around three philosophers who played pivotal roles in elucidating this pattern. Anaximander is attributed with the earliest recognition of this pattern, marking the initial endeavour in the history of Greek philosophy to comprehend and expound upon the natural and variational phenomena within the cosmos. Anaximenes, subsequently, provides a systematic and distinct mechanism to elucidate the change between opposites. Then, Heraclitus generalizes the pattern, regarding it as the foundational and universal law governing changes for all things. This change pattern conceptualized by Heraclitus, resonates throughout the Greek philosophical lineage, including Plato, irrespective of their stance on the reality of change.

Let us begin with Anaximander. It is widely acknowledged that we have a directly quoted fragment from Anaximander, preserved through the verbatim citation of Simplicius, which provides the earliest textual evidence reflecting upon the concept of change between the opposites:

> Among those who say that it [i.e. the principle] is one, in motion, and unlimited, Anaximander of Miletus, son of

> Praxiades, who was the successor and disciple of Thales, said that the principle and element of beings is the unlimited; he was the first to call the principle by this term. He says that it is neither water nor any other of what are called elements, but a certain other unlimited nature from which come about all the heavens and the worlds in them. And the things out of which birth comes about for beings, into these too their destruction happens, **according to obligation: for they pay the penalty and retribution to each other for their injustice** (κατὰ τὸ χρεών. διδόναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας) according to the order of time—this is how he says these things, with rather poetic words. (Simpl. *In Phys.*, 24.13-21 = DK12 B1= TP2 Ar163. LM translation, adapted)

The sentence highlighted in bold type is acknowledged as the surviving fragment of Anaximander. As Mansfeld points out, in a long period of time up until the late nineteenth century, most scholars were led astray by the mistaken omission of the word 'ἀλλήλοις' (to each other) in the *Aldina* (Venice, 1526) which stood as the sole complete printed edition of Simplicius' *In Aristotelis Physicorum libros commentaria* prior to Diels' work. Some scholars, upon recognizing the absence of 'ἀλλήλοις', opted to disregard its existence in the correct text. Without 'ἀλλήλοις', the text seemed to suggest that the becoming of things by separating from the *Apeiron* or the unlimited was an unjust and guilty action towards the *Apeiron*, while they pay back this debt to the *Apeiron* by returning to it as their death. Conversely, the accurate text incorporating 'ἀλλήλοις' implies that Anaximander provides a dynamic system in which entities generate

from each other and become the others as encroachment and revenge.[6] Therefore, grounded in the correct reading incorporating 'ἀλλήλοις', Anaximander appears to adhere, to some extent, to the principle that entities change between the opposites.

Then, pertinent questions emerge, namely: (a) What is the extent of this principle within Anaximander's theory? Namely, (b) which things or what kind of things, according to him, change in that way? And then, (c) what is the essence of that kind of change? In addressing these inquiries, another report from Simplicius is remarkable:

> The other way is that in which they no longer ascribe change to matter nor explain becoming by alteration of the substrate, but by extraction; for the opposites are in the substrate, which is an unlimited thing, and that they are extracted from it, says Anaximander; he was the first to call the substrate a principle. **The opposites are hot, cold, dry, wet and the rest** (ἐναντιότητες δέ εἰσι θερμὸν ψυχρὸν ξηρὸν ὑγρὸν καὶ τὰ ἄλλα)**.** (Simpl. *In Phys.*, 150.20-25 = TP2 Ar169. Taylor translation, adapted)

In accordance with this, some scholars posit that the fundamental subjects within Anaximander's dynamic equilibrium system consist of opposing elements, including hot and cold, dry and wet, and possibly several other similar entities. Despite the variations in their interpretations, there is a consensus among scholars that, within this context, the things changing between the opposites are concrete entities (such as fire, and water) rather

[6] Mansfeld, J., 2010.

than qualities (such as hot, and wet).[7] Further, as argued by *KRS*, the concept of interchange between opposites is not only a fundamental principle within Anaximander's cosmogony but extends to the current natural world as well—just as "heat and drought in summer seem to be pitted against cold and rain in winter."[8] If this interpretation holds, Anaximander articulates a universal law applicable to various phases of the cosmos, encompassing both celestial bodies and more mundane entities.

Nonetheless, this interpretation primarily relies on Simplicius' account (TP2 Ar169), which may be subject to skepticism. As Lloyd claimed, this text is probably not a direct report of Anaximander's philosophy, but an Aristotelian comment on it. The style of terminologies employed in the text does not align closely with Anaximander's own language. Perhaps Aristotle and his followers reinterpreted Anaximander's theory in terms of hot and cold, wet and dry.[9] Although those who accept Simplicius' report could defend that Anaximander regards the change as occurring between oppositional substances (such as fire, water, wind, etc.) rather than opposite qualities (such as hot, wet, etc.), those who question the reliability of Simplicius' testimony may further query whether Anaximander actually presents the interchange between opposites as a universal natural law. Kočandrle and Couprie, for instance, argue that Anaximander does not speak of opposites in general. Rather, the only pair of opposites authentically mentioned by Anaximander is hot and cold, or

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[7] Cf. Vlastos, G., 1947:171. Cornford, F. M., 1952: 161-2. Kahn, C. H., 1960: 161-3. Kirk, G. S., Raven, J. E., & Schofield, M., 1983: 119-120. Freudenthal, G., 1986: 199. Graham, D.,2006: 34-44.

[8] *KRS*, 119.

[9] Lloyd, G. E. R., 1964.

more precisely, flame and air. Moreover, this pair is primarily discussed in the context of the generation of the heavens and not in other phases of the cosmos.[10] Mansfeld even argues that the fragment DK12 B1 itself implies no interchange system of opposites at all.[11]

Our objective is not to delve deeply into this scholarly debate. To provide definitive answers to our initial questions, we must examine Anaximander's doxographies to ascertain whether he indeed describes changes between opposites. The result is quite unequivocal. In addition to the possible change between flame and air in the cosmogony, which garners widespread acknowledgement, at least two more pieces of evidence can be identified. First, in Aristotle's *Meteorology*, he claims,

> And those who are wiser in human knowledge give an account of its origin: for they say the terrestrial region was at first entirely moist, but that, while it was being dried out by the sun, the part that evaporated produced the winds and the returns of the sun and moon, and what remained formed the sea; and this is why they think that it diminishes while it dried out and that one day it will be completely dry. (Arist. *Meteor*. 2.1 353b5-11 = DK12 A27 = TP2 Ar8. LM translation, adapted)

Aristotle clearly reports the view that the dry land comes from the moist and the sea. The process from wet to dry is a typical change between the opposites. Alexander of Aphrodisias further points out that according to Theophrastus' report, this opinion belongs to Anaximander and Diogenes

[10] Kočandrle, R., & Couprie, D., 2017: 73-85. Also, cf. Hölscher, U., 1970.
[11] Mansfeld, J., 2011.

of Apollonia (Alex. *In Meteor.*, 67.11-12 = DK12 A27 = TP2 Ar84), which is also confirmed by Aëtius (Aët. 3.16.1 =DK12 A27= TP2 Ar66). *KRS* worries that this testimony might suggest the completely dried death of the world, potentially undermining the notion of the eternal dynamic cycle of encroachment and retribution outlined in DK12 B1.[12] But this concern is possibly misleading, as DK12 B1 does not guarantee the perpetual existence of the universe. Instead, it may align more suitably with smaller-scale cycles of change. For instance, Hippolytus reports,

> Winds come about when the finest vapours of the air are detached and when, set into movement, they are agglomerated; **and rains from the vapour coming from the earth by the effect of the sun is released** (ὑετοὺς δὲ ἐκ <τῆς ἀτμίδος> τῆς ἐκ γῆς ὑφ' ἥλιον ἀναδιδομένης)**;** and lightning when the wind falls upon clouds and bursts them. (Hippol. *Ref.* 1.6.7 = DK12 A11 = TP2 Ar75. LM translation)

This text describes a very subtle circulative process of rain which includes the interchange between the wet and the dry. Heated by the sun, the moist land dries out, and from its vapour the wet rain generates. Then after the rainfall, being implied by this text, the dry land becomes moist again or is even overrun by the sea. Therefore, during this process, not only does the land change between wet and dry, we can also recognize a more macroscopic circulation of transformation between the earth and the rain as a pair of opposites. They perfectly fit the encroachment and

[12] *KRS*, 140. Thus, they assume that a 'great winter' will immediately come after the world being completely dried out which will reverse the whole process until the land is overrun by sea. But this idea lacks direct and sufficient evidence. An alternative solution, cf. Freudenthal, G., 1986.

retribution mentioned in DK12 B1. Namely, on the one hand, the moist land is replaced by the dry, and then it becomes wet again. On the other hand, more importantly, the generation of rain is injustice for the (moist) land, while it pays this debt by falling and then wetting the land.

Another case that can be treated as the change between opposites is as follows. Aëtius also reports,

> (On thunder, lightning, thunderbolts, whirlwinds, and typhoons) Anaximander: all of these phenomena come about from wind. For when this has been caught in a thick cloud but then breaks out violently by reason of its fineness and lightness, the tearing causes the noise, **and the crack, against the blackness of the cloud, causes the flash** (ἡ δὲ διαστολὴ παρὰ τὴν μελανίαν τοῦ νέφους τὸν διαυγασμὸν ἀποτελεῖ)**.** (Aët. 3.3.1 = DK12 A23= TP2 Ar63. LM translation, adapted)

In this testimony, the phenomenon of flash, characterized by its luminance, emanates from its opposing counterpart, the dark and black cloud. Subsequently, once the transient lightning ceases, the obscurity of the cloud reasserts itself. Therefore, the black cloud and the bright flash could be considered as another pair of opposites that encroach and return to each other as described in DK12 B1.

Hence, it becomes evident that Anaximander does indeed treat some transformations as changes between opposites. He articulates the changes or transformations between wet and dry lands, land and rains, as well as flash and clouds. Consequently, this pattern manifests more ubiquitously

than Kočandrle and Couprie acknowledge. It is not confined solely to the cosmogonical phase but extends to encompass meteorological phenomena within the contemporary world, as we have observed. This transition between opposites, therefore, embodies Anaximander's encapsulation and reflection of worldly phenomena

Nevertheless, it remains uncertain whether this pattern is as universally applicable as asserted by Vlastos, Freudenthal, and, and *KRS*. A dearth of concrete textual evidence distinctly stipulates that all natural phenomena conform to this mode of change.[13] Namely, the ambiguity resides in whether the change between opposites represents a fundamental and comprehensive natural law or merely a limited rule governing specific categories of things.

Moreover, Anaximander's conception of the mechanism underlying change remains nebulous. As Classen noted, Anaximander seems to possess "a naïve notion of coming-to-be, based on an unreflected notion of substance."[14] Both aspects of ambuiguity would be addressed by his successors: Anaximenes expounds upon the mechanism of change explicitly; while Heraclitus introduces a much broader and more systematic framework for the change between opposites.

As the next member of the Milesian school, Anaximenes' conception of change aligns with Anaximander's to some extent, albeit with subtle distinctions. In contrast to Anaximander, Anaximenes posits that air, rather than the *Apeiron*, serves as the *arche* of everything. Furthermore,

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[13] Cf. Graham, 2006: 68-70. But Graham regards that this principle only occurs in the cosmogony, while we believe that it is widely used in all phases of the universe.
[14] Classen, J., 1977: 98.

he introduces a well-defined mechanism of change that lacks articulation in Anaximander's account. The ensuing report is a testimony from Theophrastus collected by Simplicius:

> Anaximenes of Miletus, son of Eurystratus, a companion of Anaximander, says too, as he does, that the underlying nature is one and unlimited, but not that it is indeterminate, as he does, but rather it is determinate, for he says that it is air. **It differs by its rarefaction or density according to the substances: rarefies, it becomes fire; condensed, wind, then cloud; even more, water, then earth, then stones; and everything else comes from the last** (διαφέρειν δὲ μανότητι καὶ πυκνότητι κατὰ τὰς οὐσίας. καὶ ἀραιούμενον μὲν πῦρ γίνεσθαι, πυκνούμενον δὲ ἄνεμον, εἶτα νέφος, ἔτι δὲ μᾶλλον ὕδωρ, εἶτα γῆν, εἶτα λίθους, τὰ δὲ ἄλλα ἐκ τούτων)**.** As for motion, he too considers it to be eternal; and it is because of it that change too comes about. (Simpl. *In Phys.* 24.26-25.1 = DK13 A5 = TP2 As 133. LM translation, adapted)

An explicit and systematic mechanism of change between opposing elements is discernible within this context. The air is considered the *arche* of the universe. And through its rarefaction, air becomes fire, while it becomes wind, cloud, water, earth and stone, etc. when being condensed. Unlike Anaximander who only alludes vaguely to the pattern of change between opposites, Anaximenes offers a precise description of this pattern, contending that rarefaction and density serve as the ways by which entities undergo change and transformation. In accordance with this mechanism, more rarefied entities, such as fire, originate from their

opposites, namely denser entities such as air, and *vice versa*. As noted by Graham, this theory even finds resonance in Plato's *Timaeus* (*Tim.* 49b7-e7).[15]

But how to understand this mechanism? Theophrastus, in the aforementioned testimony, regards the air as the 'underlying' (ὑποκείμενον), a term unmistakably rooted in Aristotelian philosophy. This terminology, however, may suggest the alleged Peripatetic 'material monist' which is a label that does not apply to Anaximenes. From an Aristotelian perspective, Anaximenes' air would be regarded as the fundamental and eternal substance from which all other entities emerge and ultimately return. Furthermore, as the underlying and stable essence of all things, air would ensure that transformations between opposites (e.g., fire and cloud, wind, water, etc.) are mere alterations rather than generative processes.[16] However, this interpretation might be untenable. Heidel correctly argues that the distinction between essence and attribute, which is the foundation of the 'material monist', does not align with the intellectual milieu of Anaximander's and Anaximenes' era.[17] Instead, Anaximenes' description precisely delineates the sequence of the substantial transformations of entities.[18] for instance, air completely vanishes and transmutes into fire, whereas it undergoes a thorough transformation into cloud, water, or earth through condensation, leaving no remnants.

And further, as we have argued, Anaximander mainly concerns himself

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[15] Cf. Graham, 2003.
[16] Barnes, J., 1982: 29-30. Also cf. Graham, 2003: 332-333.
[17] Heidel, W. A., 1994: 93.
[18] Graham, 2003: 335.

with the dynamic interchanging system of the concrete opposite entities rather than opposite properties. Conversely, Anaximenes seems to propose that all changes between opposing entities can be categorized through the opposition of hot and cold attributes, as these attributes emerge as consequences of the processes of contraction and rarefaction. In essence, what rarefies is hot and what condenses is cold. Plutarch reports,

> Or else, as ancient Anaximenes thought, let us accept neither cold nor hot as substance, but consider them to be common affections of matter supervening during its transformations. **For he says that the contraction and concentration of this is cold, while what is loose in texture and slack (calling it this very wat in his own words) is hot** (τὸ γὰρ συστελλόμενον αὐτῆς καὶ πυκνούμενον ψυχρὸν εἶναί φησι, τὸ δ' ἀραιὸν καὶ τὸ χαλαρὸν—οὕτω πως ὀνομάσας καὶ τῷ ῥήματι—θερμόν)**.** And that is why it is said, not implausibly, that a man emits both heat and cold from his mouth: for the breath is cooled when it is pressed together and condensed by the lips, whereas when the mouth is distended it comes out of it heated by the effect of its rarefaction. (Plut. *De prim. frig.* 7.947F = DK13 B1 = TP2 As 27. LM translation, adapted)

If Plutarch's report is reliable, Anaximenes indeed accords paramount importance to hot and cold as the fundamental opposing attributes transcending all other opposing entities. Hotness, as posited, arises from the rarefaction of entities, while coldness results from increased density.[19]

[19] Cf. Hankinson, 1998: 24.

Plutarch underscores the use of the term 'slack' (χαλαρός) as originating from Anaximenes himself, indicating that this quotation likely originates from an authentic work by Anaximenes, thereby enhancing the reliability of this testimony.[20] And this is also confirmed by Hippolytus' report (Hippol. *Ref.* 1.7.1 = DK13 A7 = As 56). Consequently, it is reasonable to deduce that within the framework of rarefaction and density of air as the *arche*, fire is hot while cloud or water, earth, stone, etc. are cold. Moreover, among those entities generated through the condensation of air, the less dense things are comparatively hotter than the denser entities and *vice versa*. For instance, a cloud is hotter than earth or stone. This is supported, to some extent, by Anaximenes' meteorology, as reported by Aëtius:

> Anaximenes: clouds are formed when the air becomes extremely condensed, and if it becomes even more concentrated rains are squeezed out; snow when the water freezes while it descends; and hail when some air is enclosed together with the moisture. (Aët. 3.4.1 = DK13 A17 =TP2 As 42. LM translation)

In these natural phenomena, the greater the condensation of air, the lower the temperature becomes in meteorological terms. Snow and hail, denser than air and cloud, undoubtedly possess lower temperatures than the latter. Thus, Anaximenes, akin to Anaximander, primarily focuses on the transformations and interchanges of tangible entities when elucidating the mechanism of change between opposites. However, he extends his understanding by recognizing that all changes between opposing elements can be distilled into the principles of rarefaction and contraction,

[20] *KRS*, 148.

corresponding to the opposing and relative attributes of hot and cold. Consequently, Anaximenes' theory of change mechanism is systematical and clear-cut.

This mechanism also serves as a fundamental principle in cosmogony. We have a testimony from Hippolytus suggesting that the heavenly bodies originate from the rarefaction of the moisture leaving from the earth (Hippol. *Ref.* 1.7.5 = DK13 A7 = As 56). And Aëtius' testimony also indicates the fiery nature of the celestial bodies (Aët. 2.13.10 = DK13 A14 = TP2 As 124). The earth itself, according to Pseudo-Plutarch's doxography, is the first thing emerging from the air through compression (Ps.-Plut. *Strom.* 3 = DK13 A6 = As 83).[21] And obviously, the fiery celestial bodies as the rarefied entities are hotter than the earth.

To recapitulate, both Anaximander and Anaximenes underscore the change between opposing elements as a fundamental pattern of change, with their focus mainly directed towards the transformations and interchanges between opposing entities, such as land and rain, air and fire, earth and water, and more. Anaximander hardly delves into changes between opposing attributes, whereas Anaximenes exclusively addresses hot and cold as consequences and effects of changes between opposing

[21] There are some conflicts between the testimony of Hippolytus and the one of Pseudo-Plutarch. In Hippolytus' report, the celestial bodies are fiery, while in Pseudo-Plutarch's they are earthy. And then, according to Hippolytus, the heavenly bodies are hot and fiery due to rarefaction, which process perfectly fits the mechanism of change. But Pseudo-Plutarch claims that the heat of sun comes from its swift motion. Pseudo-Plutarch's story is apparently strange to Anaximenes, for the philosopher always emphasizes the rarefaction as the reason of being hot. Pseudo-Plutarch very probably gets the wrong impression from Theophrastus' report in which everything besides air, fire, wind, cloud, water, earth and stone is said to come from the stones (DK13 A5). Also cf. *KRS*, 152.

entities. Furthermore, their theories of change span multiple domains, encompassing cosmogony and meteorology. However, a significant difference emerges. Anaximander does not provide a clear, systematic statement regarding the essence of this type of change, while Anaximenes offers an intricate mechanism involving rarefaction and contraction between opposing entities, giving rise to the attributes of hot and cold. Indeed, hot and cold conspicuously underscore these transformations as changes between opposites.

Heraclitus, in turn, takes a step further. He not only adopts the notion of change between opposing entities from Anaximander and Anaximenes but also generalizes it as a more comprehensive and universal principle. The pattern of change between opposites also extends to attributes. Furthermore, his concept, known as the flux theory or *Flusslehre*, leaves a profound impact on later philosophers and significantly shapes their fundamental understanding of the world. In contrast to his predecessors, Heraclitus emphasizes the unity, or even identity, of opposites within change, a viewpoint that subsequently becomes a primary opponent of the Eleatic metaphysics. These debates form the backdrop and foundation of Plato's theory of change.

Like Anaximander and Anaximenes, Heraclitus discusses the changes between concrete opposing entities as well. As he says,

> The transformations (turnings) of Fire: First sea, and of the sea the half is earth, the half prester (burning). … <Earth> is liquefied as sea, and it is measured in the same proportion as existed before it became earth. (Clem. Alex. *Strom*. 5.105.3,5 et

al. = M.53 = DK22 B31. Marković translation)

As Marković astutely points out, this fragment encapsulates "the constant, normal natural processes which are every day going on."[22] The fire becomes water, and water returns to be fire; also, the water earth, and earth water. These changes follow cyclic patterns, echoing the philosophies of Anaximander and Anaximenes, as previously discussed.[23] Of greater significance, Heraclitus interprets these changes as transformations rather than mere alterations, distinct from the 'material monist' theory proposed by Aristotle, as nothing persists in the process of transformation. As Kahn argues, this fragment implies that water stands at the opposite pole of fire, and then "sea represents the death and defeat of fire."[24] This is further verified by what Heraclitus claims,

> For souls it is death to become water, for water it is death to become earth; but out of earth water comes-to-be, and out of water, soul. (Clem. Alex. *Strom*. 6.17.2 et al. = M. 66 = DK22 B36. Marković translation)

Heraclitus employs the terms 'death' and 'come-to-be' to signify a profound transformation between opposite entities, where the preceding entity undergoes complete conversion into its successor, resulting in the full replacement of the former by the latter. These texts do not exhibit any indication of 'material monism', as in the texts of Anaximander and Anaximenes.

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[22] Marković, 1967: 289.
[23] Guthrie, 1962: 203-204; Kahn, 1979: 139. Also, cf. Wiggins, 1982: 5.
[24] Kahn, 1979: 140.

However, in contrast to his predecessors from the Milesian school, who primarily focus on the transformations of entities, Heraclitus applies this principle of change between opposites on a broader scale. For instance:

> Cold things become warm, warm thing becomes cold; moist thing becomes dry, dry (parched) thing becomes wet (τὰ ψυχρὰ θέρεται, θερμὸν ψύχεται, ὑ<γρὸν> αὐαίνεται, καρφαλέον νοτίζετ<αι>). (Schol. in Tzetz. *In Il.*, p. 126 = M.42 = DK22 B126. Marković translation)

Hot and cold, dry and wet—the fundamental opposing properties acknowledged by the philosophers since the time of Anaxagoras—are asserted to undergo cyclic transformations into their contraries. Heraclitus not only delineates the cyclical change of these primary opposing properties but also numerous other commonplace pairs, including:

> As [one] and the same thing (ταὐτό τ' ἔνι) there exists in us living and dead, and the waking and the sleeping, and young and old: for these things having changed round are those, and those things having changed round are these ones (γὰρ μεταπεσόντα ἐκεῖνά ἐστι, κἀκεῖνα πάλιν μεταπεσόντα ταῦτα). (Ps.-Plut. *Cons. Ap.* 10 106E = M.41 = DK22 B88. Marković translation)

Then, young Heraclitus' becoming old is actually a replacement of the young Heraclitus by the old one. Similarly, when Heraclitus dies, the living Heraclitus ceases to exist.[25] Some of these changes even exhibit

[25] Triplett, 1986: 18; Graham, 2006: 122-129. Also, cf. Neels, 2018: 431. But Neels

circular patterns: after transitioning to their opposites, they may revert to their original states. Evidently, these properties are asserted to transform into their opposites, symbolizing the change between opposites. Thus, both concrete entities and properties adhere to this transformative pattern throughout their changes. When we use the terms ‘entity’ and ‘property’, we are not implying an Aristotelian substance-property structure, as there is insufficient and convincing textual evidence to support this concept in Heraclitus’ theory. Rather, we intend to emphasize that Heraclitus no longer focuses solely on natural entities, as his predecessors did, but also considers the various aspects of each individual entity. Consequently, Heraclitus inherits the Milesian concept of change between opposites and potentially generalizes it as a more universal and fundamental rule.[26]

And although those changes are transformations rather than Aristotle’s alterations based on the alleged ‘material monism’, it does not necessarily imply that Heraclitus views them as generations in the Aristotelian sense. In this fragment, for instance, Heraclitus appears to perceive these changes between opposites as transformations but refers to them as ‘one and the same thing’. Such changes do not inherently negate the identity of the changing subjects. This perspective may appear contradictory from a modern viewpoint, but it is very like what is held by Heraclitus himself.

The so-called ‘river fragments’ provide further insights into Heraclitus’s philosophy. On one hand, they illustrate the universality and continuity of change in another manner—namely, all things are in perpetual flux. On the other hand, these texts offer a glimpse into how Heraclitus

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only admits the elemental transformations represented by B126 while rejects the transformation of other entities.

[26] Similarly, cf. Vlastos, 1955: 356-357.

comprehends the seemingly paradoxical concept of non-generative change between opposites. According to the fragments:

a) Upon those who are stepping into the same rivers different and again different waters flow (ποταμοῖσι τοῖσιν αὐτοῖσιν ἐμβαίνουσιν ἕτερα καὶ ἕτερα ὕδατα ἐπιρρεῖ). (Cleanthes *apud* Ar. Did. in Eus. *PE* 15.20.2 = M.40a = DK22 B12. Marković translation)
b) We step and we do not step into the same rivers, we are and we are not (ποταμοῖς τοῖς αὐτοῖς ἐμβαίνομέν τε καὶ οὐκ ἐμβαίνομεν, εἶμέν τε καὶ οὐκ εἶμεν). (Heracl. *Alleg*. 24.5 = M.40c[2] = DK22 B49a. LM translation)
c) It is impossible to step into the same river twice (ποταμῷ οὐκ ἔστιν ἐμβῆναι δὶς τῷ αὐτῳ). (Plut. *De E* 18, 392B = M.40c[3] = DK22 B91)

Scholarly debates persist regarding the authenticity of these fragments attributed to Heraclitus. I accept B12 and B91 as genuine statements of Heraclitus, in line with Tarán's assessment.[27] Through these similes, Heraclitus appears to argue that all things are in a state of flux, akin to the ceaseless flow of a river. The prevailing consensus among most scholars is that Heraclitus does indeed uphold the concept of flux.[28] When you step into a river, different waters pass by, which implies that the river undergoes constant and endless changes, reflecting the notion that all

[27] Tarán, 1999. Also, Kahn (1979) admits B12 and B91. *Contra*, such as: Kirk (1954) and Marković (1967) who only accepts B12; Vlastos (1955) B49a and B91; DK (1964) B12, B49a and B91, etc.
[28] Such as Vlastos, 1955; Guthrie, 1962; Kahn, 1979; Barnes, 1982; Tarán, 1999; Graham, 2006.

things are in flux. And in accordance with the fundamental pattern discussed earlier, it is believed that entities in this world undergo transformative, continual, and possibly cyclical changes.[29]

A minority of scholars, Kirk and Marković for instance, who accept the credibility of only B12 among the three river fragments, dispute the notion that Heraclitus intends to emphasize the constancy of change with the river simile. Kirk acknowledges the universality of change in Heraclitus' theory, and which is indeed very common in early Greek thought, but he contends that B12 does not imply that everything is in a constant state of change at every moment. Instead, Kirk argues that Heraclitus emphasizes the constancy or 'measure' (μέτρον) preserved in a change. He suggests that the concept of constant flux may have originated with Melissus rather than Heraclitus.[30] Similarly, Marković tentatively interprets this simile as an illustration of the unity of opposites, specifically sameness and difference. In this view, everything is both the same and different compared to itself during change.[31] Therefore, they think the river-simile is supposed to emphasize the constancy and sameness of the changing subjects. Just as Graham's comment, according to them, you can step into the same river—precisely contrary to B91 which they do not accept.[32]

In this analysis, we predominantly align with the majority view, as B91 is persuasively argued to be reliable. Nevertheless, the two perspectives are

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[29] Graham, 2006:145.
[30] Kirk claims, "the river-fragments, then, seems to exemplify not the constancy of change—for there is no hint that all things resemble rivers—but the regularity of natural change in one particular manifestation." Cf. Kirk, 1951: 37-42.
[31] Marković, 1967: 212-213.
[32] Graham, 2006: 116.

not markedly divergent. First, the minority view, exemplified by Kirk, more or less acknowledges universal change. There is little contention regarding the notion that beings are in a constant state of flux within Heraclitus' philosophy. Second, the majority view does not advocate an extreme understanding of flux. It avoids conflating Heraclitean flux with the more extreme Cratylean perspective, which posits that everything is perpetually changing in all respects.[33] Cratylus, according to Aristotle, does not even allow for the possibility of stepping into the same river 'even once', while Heraclitus still permits this. Both views recognize the enduring identity of changing things to some extent, as exemplified by the river being described as "the same" in B12. Graham elucidates this perspective by asserting that "the changing waters preserve the river, while the perennial river concentrates and conducts the changing waters. More generally, local change begets global stability, while global stability focuses local change."[34]

Hence, Heraclitus advances a comprehensive understanding of the change that characterizes the world according to his philosophy. He conceives of the entire world or universe as being in a state of flux, where all things are in perpetual change, analogous to the continuous flow of a river. Both entities and properties of things conform to his pattern of change between opposites. This understanding encapsulates the essence of change within Heraclitus' theory, defining it as a form of transformation. Crucially, this transformation does not entail a loss of identity or sameness for the changing entities.

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[33] Graham, 2006: 116.
[34] Graham, 2006: 132.

Undoubtedly, Heraclitus' depiction of a changing world profoundly influences later philosophers. They universally acknowledge, based on empirical observations, that the world lacks stability, and everyday entities are constantly oscillating between opposites. The debates among these philosophers revolve around whether to accept this view as an accurate description of reality and, if so, how to interpret and comprehend this observable phenomenon. Figures such as Melissus (DK30 B8) and Empedocles (DK31 B17) explore strategies that we will delve into in detail in the subsequent section.

Plato, too, appears to be significantly influenced by Heraclitus' change theory. As previously noted, Plato posits that the change between opposites is a fundamental pattern in the realm of sensible objects. And apparently, he partly accepts the flux picture of the world. Not only does he attribute the saying "πάντα χωρεῖ" (Everything flows) to Heraclitus (*Crat*. 402a8), but he himself also seems to claim that all sensible things are unstable and always changing (Such as *Phaed*. 78d-e; *Ti*. 28a, etc.). Nonetheless, scholars debate whether Plato misinterprets Heraclitus' theory of flux and whether he takes the concept to an extreme, asserting that all sensible things are in perpetual change in every aspect [35] If this is the case, Plato's theory of change could rightly be considered a 'Heraclitean Flux,' as it appears to derive directly from Heraclitus. [36]

However, an often overlooked aspect of Plato's philosophy is his

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[35] Cf. Irwin, 1977; Moyal, 1988; Adomenas, 2002; Colvin, 2007; Ademollo, 2018, etc.

[36] Aristotle first presents this opinion in the ancient world (*Metaph*. 987a33-34, etc.), which is somehow followed by many contemporary scholars, such as: Cornford, 1935: 36; Kahn, 1985: 244; Silverman, 2009: 5, etc.

departure from Heraclitus in his understanding of the essence of such change. The fundamental distinction between them lies in their interpretation of the change between opposites. As we have argued, Heraclitus accentuates the sameness or identity of entities during their transformation, while Plato characterizes this change between opposites as generative, resulting in a complete loss of identity for the changing entities.[37] This critical difference is exemplified in the *Symposium*, in which Diotima claims:

> "And this is possible in one way only: by reproduction/generation (τῇ γενέσει), because it always leaves behind a new young one in place of the old (ἀεὶ καταλείπει ἕτερον νέον ἀντὶ τοῦ παλαιοῦ). Even while each living thing is said to be alive and to be the same—as person is said to be the same form childhood till he turns into and old man—even then he never consists of the same things, though he is called the same, but he is always being renewed (ἀλλὰ νέος ἀεὶ γιγνόμενος) and in other respects passing away, in his hair and flesh and bones and blood and his entire body…And in that way everything mortal is preserved, what is departing and aging leaves behind something new, something such as it had been (οὑτῳ γὰρ τῷ τρόπῳ πᾶν τὸ θνητὸν σῴζεται, οὐ τῷ παντάπασιν τὸ αὐτὸ ἀεὶ εἶναι ὥσπερ τὸ θεῖον, ἀλλὰ τῷ τὸ ἀπιὸν καὶ παλαιούμενον ἕτερον νέον ἐγκαταλείπειν οἷον αὐτὸ ἦν)." (*Smp*. 207d2-208b2)

Scholars like Guthrie and Kahn draw parallels between this text and

[37] Also cf. Manson, 2016: 7-26; esp. 10.

Heraclitus' river fragments, suggesting that Plato adeptly paraphrases Heraclitus' flux theory and incorporates it into his own theory of sensible things.[38] However, upon closer examination, it becomes evident that the relationship between Diotima's speech and Heraclitus' philosophy is quite the opposite. In fact, Diotima's speech should be interpreted as a critique of Heraclitus, as it explicitly highlights the absence of self-identity in changing things. These entities are merely "said to be the same" during the process of change, revealing their lack of genuine diachronic identity—meaning they lack true oneness and sameness over time. According to Diotima, such changes inherently lead to the loss of an object's oneness and sameness, resulting in what she considers a form of generation. Accordingly, Heraclitus' assertion that changing things can retain their sameness is fundamentally untenable. This perspective is further reinforced in the *Phaedo*, where the change between opposites is referred to as 'γένεσις' (*Phd.* 70d-71b), and in the *Parmenides*, where all forms of motion and change are argued to be generative (*Prm*. 162b-163b). Thus, in contrast to Heraclitus, Plato views the change between sensible opposites as generative, implying that it inevitably strips objects of their identity and sameness.

Therefore, the concept of generative nature of change, which is a critical and ontological characteristic of Platonic change, does not originate from Heraclitus. Again, when we use the term "generation," we are referring to a change in which the subject becomes an entirely new entity with no continuity or identity with its previous state before the change. It is clear that Heraclitus does not impose generative character on change, whereas Plato does so explicitly in the *Symposium* and several other dialogues.

[38] Guthrie, 1962: 210; Kahn, 1979: 167.

Therefore, it would be imprecise to label Plato's understanding of change as 'the Heraclitean Flux.' Indeed, as we will soon explore in the next section, the notion of generative change was widespread among philosophers preceding Plato. Heraclitus' genuine legacy, inherited by Plato and other pre-Socratic philosophers, pertains to the generalized pattern of change between opposites and the overarching portrayal of the empirical world as in a state of perpetual flux. The generative nature of change must have had a different source of origin.

2. Generative Change, the Eleatic School and the Pluralists

The concept of generative change undoubtedly finds its roots in the Eleatic school. As they ascribe generative characteristics to all forms of change, they firmly uphold that the real Being or What-is, in accordance with their beliefs, cannot partake in any form of change or motion. This doctrine is interpreted in various ways by Pluralists and Plato alike. The inquiries into change undertaken by Greek philosophers after Parmenides are largely driven by the same fundamental question posed by this Parmenidean doctrine: How could a real being or What-is move and change?

2.1 The Eleatic School and Parmenides' Principle of What-is

While the awareness of generative change is first systematically articulated by Parmenides, its origins can be traced back to Xenophanes. In the ancient world, Xenophanes is consistently recognized as the forerunner of the Eleatics (Plato, *Soph.* 242d) and tutor of Parmenides (Aristotle, *Metaph.* 986b22). And moreover, he is thought to argue that the principle is one (i.e. the god), unlimited and motionless (Nicolaus of Damascus *apud* Simpl. *In Phys.* 23.14-15 = DK21 A31), an idea thought

to have deeply influenced and inspired Parmenides and the Eleatic philosophers (Aristocl. *Philos.* 7 = DK21 A49). Conversely, modern scholars tend to regard Xenophanes more as a poet or theologian rather than a genuine Eleatic philosopher. Although there are disagreements in detail, most contemporary scholars maintain that Xenophanes' alleged monist 'doctrine' lacks authenticity and is more likely an outcome of 'Eleatization' by ancient doxographers.[39] Therefore, the philosophical resemblance and connection between Xenophanes and Parmenides is very probably just superficial.[40] Brémond even suggests that when Plato refers to Xenophanes as the 'starting-point' of 'our Eleatic tribe' in the *Sophist* (*Soph.* 242d), he is not indicating Xenophanes' position within the Eleatic school but merely alluding to the fact that Xenophanes was one of the early scholars residing in the city of Elea—a geographical association.[41]

While it may be true that Xenophanes did not develop a rigorous and strict monist theory and that Parmenides likely did not derive his alleged monism from Xenophanes, this does not imply that Parmenides drew nothing from Xenophanes. Indeed, Xenophanes' conception of change, or at least the contemporary ideas prevailing in the Eleatic circle, as reflected in Xenophanes' verses, laid the groundwork for Parmenides' and his followers' theories of change. Xenophanes is reported to write:

> αἰεὶ δ' ἐν ταὐτῷ μίμνει κινούμενος οὐδέν,
> οὐδὲ μετέρχεσθαί μιν ἐπιπρέπει ἄλλοτε ἄλλῃ.
> He [i.e. the god] always stays in the same place, not moving at

[39] Mansfeld, 1987: 301. And cf. Brémond, 2000, esp. 3-4.
[40] *Contra*, Finkelberg, 1990: 155-157. Criticism of Finkelberg's argument, see Brémond, 2000: 4-5.
[41] Brémond, 2000: 7.

all,
And it is not fitting that he travels to different places at different times. (Simpl. *In Phys.* 23.11-12 =DK21 B26. LM translation, adapted)

[…]

ἀλλ' ἀπάνευθε πόνοιο νόου φρενὶ πάντα κραδαίνει.
But without any toil, by the organ of his mind he makes all things tremble. (Simpl. *In Phys.* 23.20 =DK21 B25. LM translation)

In these verses, it is asserted that the god remains devoid of motion. As some scholars have noted, this concept constitutes a direct critique of Homer and Hesiod, who depict the gods as exhibiting various forms of motion in their myths, akin to human beings.[42] What prompts Xenophanes to posit that his god should be motionless? Or, to be more precise, why is it deemed "not fitting" (οὐδὲ … ἐπιπρέπει) for the god to engage in movement? Lesher contends that this arises from the divine nature ascribed to the god. The god is proclaimed to be "the greatest" (μέγιστος):

One god, among both gods and humans the greatest (μέγιστος),
Neither in bodily frame similar to mortals nor in thought. (Clem. Alex. *Strom.* 5.109.1 = DK21 B23. LM translation)

According to Lesher's analysis, "the greatest" of the god (DK21 B23) "would entail instant and complete accomplishment of divine wishes and intentions across enormous expanses of space and time" without any

[42] Guthrie, 1962: 374; KRS, 1982:170; Lesher, 1992: 112-113.

movement (DK21 B25).[43] Namely, from Xenophanes' perspective, the various motions and travels of the gods in Homer's epics contradict the idea of the 'greatest' as the divine nature of the god.

It is undeniable, as previously discussed, that Xenophanes' notion of an unmoving god may not exhibit a direct philosophical connection to Parmenides' concept of What-is. However, Xenophanes' conception of the nature of motion itself could serve as a crucial resource for Parmenides' theory. If motion is deemed to potentially threaten and compromise the god's 'greatest' state and nature, forcing the god to behave like humans (DK21 B23), it implies that motion would lead to a substantial and fundamental change in the god's nature. This concept, although subtly implied in the verses, serves as a source of inspiration for Parmenides and his successors, as we will see shortly, and contributes to the development of the notion of generative motion.

This idea, while only hinted at in the verses, is sufficient to underscore its uniqueness and significance. On the one hand, it contrasts with the beliefs of the Eleatics, who generally argue that motion does not conflict with the nature and identity of gods, a point to which we will return in the next section. On the other hand, it encompasses various forms of change and motion. Previous philosophers, as argued earlier, primarily focus on transformation as the change between opposites. However, Xenophanes, or perhaps the Eleatic circle, also places significant emphasis on spatial motion. Xenophanes denies the god the capacity for spatial motion, contending that it would fundamentally alter the nature and identity of the god. Similarly, Parmenides and other Eleatic philosophers reject spatial

[43] Lesher, 1992: 113.

motion for What-is, characterizing it as generative change.

Parmenides is the first to undertake a rigorous ontological analysis of the generative nature of change. Although he negates motion and change for What-is (τὸ ἐὸν) by asserting that What-is is "entire, unique, unmoved and perfect" and entirely devoid of generation or destruction (DK28 B8.3-4), his rejection must be founded on a profound consideration of motion as the metaphysical basis. Hence, a meticulous examination of his doctrine of What-is can unveil his underlying deliberation regarding change and motion in his enigmatic poem.

Yet, it is challenging to delve into Parmenides' theory of What-is. Modern scholars offer varying interpretations concerning Parmenides' precise intent and ideas regarding What-is. The traditional one, exemplified by Guthrie, interprets it as a *numerical* or *strict monism*.[44] According to this view, what Parmenides discusses here is the sole being which really exists. Some other scholars doubt whether Parmenides truly advocates numerical monism. Mourelatos presents an alternative called *predicational monism*, suggesting that Parmenides emphasizes that each entity can only have a single predicate, and thus, a being cannot be both *F* and not-*F*.[45] Barnes, on the contrary, refutes the orthodox notion that the fragments preclude a plurality of beings.[46] Then, Curd declares that predicational monism allows the existence of more than one being. Namely, what the fragments enumerate are the criteria for a Parmenidean being.[47] Palmer takes a different stance, advocating a *generous monism* reading of Parmenides,

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[44] Guthrie, 1965: 4-6.
[45] Mourelatos, 1970: 56-60.
[46] Barnes, 1979.
[47] Curd, 1991; 1998: 64-75. And also cf. Graham, 2006: 162-168.

where Parmenides affirms the existence of a single necessary whole being, and multiple mutable and non-substantial entities.[48]

Fortunately, these interpretations do not significantly affect our subsequent analysis of Parmenides' comprehension of change. Our investigation does not hinge on a definitive answer to the question of what Parmenides' What-is is or how many types of What-is Parmenides allows. Instead, it relies on the widely accepted metaphysical characteristic of What-is or 'to be' (εἶναι) , namely, that What-is or Being always is and cannot be What-is-not, and *vice versa*. In the way of Conviction, is. He says,

> χρὴ τὸ λέγειν τε νοεῖν τ᾽ ἐὸν ἔμμεναι, ἔστι γὰρ εἶναι,
> μηδὲν δ᾽ οὐκ ἔστιν ·τά σ᾽ ἐγὼ φράζεσθαι ἄνωγα·
> It is necessary to assert and conceive that What-is is. For it is to be,
> But nothing is not. These things I command you to heed.
> (DK28 B6.1-2. Coxon translation, adapted.)

As one of the most renowned propositions, this fragment establishes a rigorous demarcation between What-is and What-is-not, adhering to the principle of non-contradiction. What-is-not cannot exist and be What-is, and conversely, What-is cannot not-exist and be What-is-not (also, DK28 B7.2). In Parmenides' view, this foundational principle renders generation and destruction of Being impossible. This is because, according to his perspective, generation has to involve the transformation of What-is-not into What-is, while destruction must entail the transition of What-is into

[48] Palmer, 2009.

What-is-not, as evidenced by the subsequent passage:

> **οὐδέ ποτ᾽ ἐκ μὴ ἐόντος ἐφήσει πίστιος ἰσχὺς / γίγνεσθαί τι παρ᾽ αὐτό· τοῦ εἵνεκεν οὔτε γενέσθαι / οὔτ᾽ ὄλλυσθαι ἀνῆκε δίκη χαλάσασα πέδῃσιν** / ἀλλ᾽ ἔχει, ἡ δὲ κρίσις περὶ τούτων ἐν τῷδ᾽ ἐστιν, / ἔστιν ἢ οὐκ ἔστιν κέκριται δ᾽ οὖν, ὥσπερ ἀνάγκη, / τὴν μὲν ἐᾶν ἀνόητον ἀνώνυμον, οὐ γὰρ ἀληθής / ἐστιν ὁδός, τὴν δ᾽ ὥστε πέλειν καὶ ἐτήτυμον εἶναι. / **πῶς δ᾽ἂν ἔπειτα πέλοιτο ἐόν; πῶς δ᾽ ἄν κε γένοιτο; / εἰ γὰρ ἔγεντ᾽, οὐκ ἔστ᾽, οὐδ᾽ εἴ ποτε μέλλει ἔσεσθαι. / τὼς γένεσις μὲν ἀπέσβεσται καὶ ἄπυστος ὄλεθρος.**
> Nor will the strength of conviction ever impel anything to come to be alongside it from Not-Being. Therefore, justice did not loosen it in her fetters and move it either to become or to be perishing but holds it fast, and the decision regarding these things depends on that of the issue, is or is not. Now it has been decided, as was necessary, to leave the one way unconceived and nameless, since it is not a real way, and for the other to be a way and authentic. And how could What-is going to be in the future? How could it come to be? Seeing that, if it came to be, it is not, nor is it, if at some time it is going to be. Thus becoming has been extinguished and perishing is unheard of. (DK28 B8.12-21. Coxon translation, adapted.)

It is evident that What-is or Being must invariably exist and cannot cease to exist at any time and under any circumstances. Parmenides demands a robust and absolute self-identity of What-is. Should it transform into What-is-not, it would necessitate a transition between What-is and

What-is-not, a contradiction with the inherent self-identity of Being. Parmenides characterizes such a transition as generation and destruction. Consequently, true Being or What-is remains exempt from both generation and destruction. Using the same reasoning, since generation and destruction purportedly derive identity from objects through transitions between What-is and What-is-not, they are unsuitable for Being.

Further, Parmenides argues that other kinds of change and motion are also incompatible with What-is. That is because, the change of an object logically depends on its becoming from or coming to be something different from its original state. And what differs from What-is is undoubtedly What-is-not. Consequently, all types of change and motion inherently involve a transition between What-is and What-is-not. In other words, generation and destruction constitute the essence of every change and motion. Thus, What-is does not change. For instance, the growth of What-is—if it could exist—is said that it must become from What-is-not (DK28 B8.5-11). This change, therefore, cannot be attributed to What-is, as it is evidently perceived as a form of generation. Indeed, Parmenides puts forth a comprehensive argument:

> αὐτὰρ ἀκίνητον μεγάλων ἐν πείρασι δεσμῶν / ἐστιν ἄναρχον ἄπαυστον, ἐπεὶ γένεσις καὶ ὄλεθρος / τῆλε μάλ᾽ ἐπλάγχθησαν, ἀπῶσε δὲ πίστις ἀληθής· / τωὐτόν τ᾽ ἐν τωὐτῷ τε μένον καθ᾽ ἑαυτό τε κεῖται / χοὕτως ἔμπεδον αὖθι μένει ·κρατερὴ γὰρ ἀνάγκη / πείρατος ἐν δεσμοῖσιν ἔχει, τό μιν ἀμφὶς ἐέργει, / οὕνεκεν οὐκ ἀτελεύτητον τὸ ἐὸν θέμις εἶναι / ἔστι γὰρ οὐκ ἐπιδεές, μὴ ἐὸν δ᾽ ἂν παντὸς ἐδεῖτο.

> But it is motionless in the coils of huge bonds, without beginning or end, since becoming and perishing have strayed very far away, thrust back by authentic conviction; remaining the same, and at the same place, it lies by itself and remains thus where it is perpetually, for strong necessity holds it in the bondage of a limit, which keeps it apart, because it is not lawful that What-is should be incomplete, for it is not defective, whereas What-is-not would lack everything. (DK28 B8.26-33. Coxon translation, adapted.)

In this fragment, the absence of generation and destruction in What-is serves as the basis for asserting that What-is remains motionless, as indicated by the term 'ἐπεί' (B8.27). This suggests that motion and change are predicated on the concepts of generation and destruction. All forms of motion would compel What-is to no longer remain "the same, and at the same place," leading it to lose its sameness and oneness, thus undergoing a process of generation. However, generation has already been ruled out for What-is. Consequently, What-is cannot exhibit any form of motion, as generation constitutes the essential characteristic of all change and motion.

Furthermore, what types of motion and change does this argument encompass? Traditionally, it was widely accepted that this text exclusively argued against spatial motion until Hermann Fränkel, Kirk, and Stokes introduced the view in the 1950s that "ἀκίνητον" should encompass all forms of motion or change. Their interpretation has since become mainstream.[49] On the contrary, Curd finds it odd to consider

[49] Kirk & Stokes, 1960. Also, cf. Tarán, 1965: 109-113; Palmer, 2009: 153-155; etc.

spatial motion as a threat to the identity of What-is. Therefore, she posits that the text's purpose is to reject alteration rather than spatial motion.[50] Bicknell advocates a compromise solution, in which Parmenides is claimed to argue against alteration in lines 26-28 while against spatial motion in lines 29-33.[51] In our perspective, Parmenides unequivocally rejects all forms of motion and change. The most compelling evidence comes from several lines later (B8.38-42), where he contrasts truth with the mistaken beliefs of mortals: What-is should be motionless (ἀκίνητον, B8.38), while the mortal believes that it possesses all kinds of change, including generation, destruction, locomotion, alteration, etc. Since this statement can be considered as the conclusion of the argument in B8.26-33 cited earlier, it undeniably demonstrates that Parmenides rejects all types of motion and change by ascribing 'motionless' to What-is.

Curd's perspective may seem aligned with our everyday intuition, as we commonly believe that local motion or rotation of an object does not compromise its identity and sameness. However, this view diverges from Parmenides' genuine argument and his perspective on this matter. As we have elucidated, all forms of change and motion, including spatial motion, are incompatible with the nature of What-is or the strict identity of What-is, precisely because they entail generative character as their essence. And it can be further confirmed by Parmenides' claim in B8.29-33 that What-is must remain in itself and at the same location, otherwise, it would become the incomplete What-is-not. This obviously implies that both spatial change and other changes would destroy the

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Those who still advocate the traditional idea that this text merely discusses spatial motion: cf. Guthrie, 1965: 36; Mourelatos, 1970: 116-119.

[50] Curd, 1998: xxiv; 84-89.

[51] Bicknell, 1967.

identity of What-is. Thus, Parmenides unquestionably regards spatial motion as generative, just like all other forms of motion and change. Indeed, for Parmenides, What-is-not not only signifies something non-existent but also something distinct from What-is. In the context of Parmenides' poem, the verb 'to-be' (εἶναι) can be employed either in an existential sense signifying existence or in a broader sense indicating possession of certain attributes or states.[52] Therefore, whether something transforms into another thing, moves to another place, or completely disappears, it inevitably undergoes a process of generation according to Parmenides' perspective.

Hence, just like Xenophanes' view, spatial motion, alteration, or other forms of change are deemed unsuitable for the divine because they would diminish its greatness. Parmenides regards all forms of change, including spatial motion, as a profound threat to the identity of What-is, since no change can avoid being generative. Generative character constitutes Parmenides' key insight into change, and this theory is passed down to his Eleatic followers in a direct way.

We have very little credible knowledge about Zeno from which we may reconstruct his complete theory of change and motion. He presents four well-known paradoxes to challenge the possibility of motion: (1) The Dichotomy: the object in motion must reach the half-way point before it gets to the end (Aristotle, *Phys*. 239b11-13 = DK29 A25); (2) the Achilles: the slowest runner will never be overtaken by the swiftness Achilles (*Phys*. 239b14-17 = DK29 A26); the Arrow: the flying arrow is at rest

[52] Cf. Kahn, 1966; and also a series of his studies after that: cf. Kahn, 2009. But we do not use the term 'predicative' to summarize the broader usage of 'to-be' in order to distinguish Parmenides from the latter Pluralists, as we will discuss later.

(*Phys*. 239b30-33 = DK29 A27); and (4) the Stadium: half a given time is equal to its double (*Phys*. 239b33-240a18 = DK29 A28).[53] All of these paradoxes concern locomotion, suggesting that Zeno shares Xenophanes' and Parmenides' preoccupation with spatial motion. However, his arguments are rooted in the physical concepts and analyses of the continuum, space, and time rather than considerations of generation or destruction. Hence, unlike Parmenides, his arguments against motion do not depend on the metaphysical idea of generative change. Due to the paucity of extant materials, we cannot conclusively determine whether Zeno disagrees with Parmenides on this matter or if his arguments about generative change did not survive.

Melissus, on the contrary, explicitly argues for the generative essence of change and motion. As a successor of the Eleatic school, he also maintains that true What-is is absolutely self-identical without any change or motion.[54] According to Simplicius' report, Melissus argues,

> In this way, therefore it [i.e. What-is] is eternal, unlimited, one, and entirely similar, and it could not either be destroyed (ἀίδιόν ἐστι καὶ ἄπειρον καὶ ἓν καὶ ὅμοιον πᾶν καὶ οὔτ' ἂν ἀπόλοιτο),

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[53] For more doxographies and reports, cf. Lee, 1967. A detailed reconstruction of the paradoxes, cf. Faris, 1996. A comprehensive collection of the most important English literatures in the 20th century, cf. Salmon, 2001.

[54] Some recent scholars try to challenge the traditional view of Melissus' acceptance of Parmenides' theory. And they conversely emphasize the essential gap between them. Palmer, for instance, argues that it is Melissus rather than Parmenides who advocates the strict numerical monism. Namely, Parmenides allows the existence of a variety of different entities, while Melissus only accepts one Being. Cf., Palmer, 2009: 205-224. However, as we said this does not affect our argument, for we only focus on their metaphysical understandings of the concept What-is, on which they have no disagreement.

> not increase in size, or change its arrangement, or suffer either pain or distress. For if it underwent any of these affections, it would no longer be one. For if it is being altered (ἑτεροιοῦται), it is necessary that what is not be similar, and what is not come to be (ἀλλὰ ἀπόλλυσθαι τὸ πρόσθεν ἐόν, τὸ δὲ οὐκ ἐὸν γίνεσθαι). If then the whole had become different by a single hair in the course of thousands of years, it would have been destroyed in the whole of this time. (Simpl. *In Phys*. 111.18-24 = DK30 B7. LM translation, adapted.)

Apparently, Melissus considers What-is as one diachronically self-identical entity.[55] This idea undoubtedly draws from Parmenides' principle that What-is always is and never becomes What-is-not. Melissus, too, interprets What-is-not as anything different from What-is. Consequently, What-is must remain entirely consistent with itself, as even the slightest alteration would compel it to become different, thus becoming What-is-not or non-Being. Therefore, change capable of rendering an object different is inherently generative and is absolutely incompatible with What-is.

A pertinent question arises: does Melissus also regard all forms of change and motion as generative, akin to Parmenides? In this context, he enumerates various types of changes: generation, increase, re-arrangement, suffering pain or distress, and being altered. This comprehensive list encompasses what Aristotle categorizes as substantial change, quantitative change, qualitative change or alteration, and activity.

[55] Concerning the diachronic self-identity of What-is, cf., Brémond, 2019.

[56] Notably, spatial motion is the only form of change, based on Aristotle's classification, not mentioned in this paragraph. However, Melissus subsequently adheres to the Eleatic tradition by rejecting the spatial motion of What-is. He contends that What-is cannot move due to the absence of void for it to traverse. Moreover, void is nonexistent since void constitutes non-being or What-is-not, a concept that cannot exist according to the Parmenidean principle (Simpl. *In Phys*. 112.6-15 = DK30 B7).[57]

Nevertheless, a clear metaphysical interpretation of how spatial motion could be generative remains absent.[58] The final piece of the puzzle may be offered by Gorgias. In his work *On What-is-not*, the Sophist parodies the Eleatic theory by arguing, "[I]t could not move [spatially] either. For if it moved, it would no longer be in the same way, but on the one hand it would not be, and on the other what is not would have come to be." (Ps.-Arist. *MXG* 980a = LM. D.26, 14) This implies that the spatial motion of something results in the destruction of the object at its previous location and the generation of a new object at its current location—clearly reminiscent of Melissus' notion of generation. Similarly,

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[56] Concerning the generative alteration, also cf., Harriman, 2019: 154-155.

[57] This argument is clearly confirmed by Plato (*Theaet*. 180e2-4) and criticized by Aristotle (*Phys*. 214a26-31).

[58] Indeed, by refuting the spatial motion of What-is, this argument might implicitly suggest that spatial motion, like other forms of change, compels What-is to become different and become What-is-not. Consequently, spatial motion is also deemed generative. This is supported by the position of this argument, placed closely after previous arguments against various generative changes of What-is. This suggests Melissus' tentative stance: on one hand, he upholds the Eleatic tradition by considering spatial motion as generative; on the other hand, he finds it practically challenging to construct a metaphysical argument against spatial motion of What-is by demonstrating that this kind of motion must be generative. Thus, he may have opted for a compromise.

although Plato does not explicitly treat spatial motion as generation in his middle dialogues, in the *Parmenides* he allows the interlocutor to assert that locomotion of something entails self-alteration, and generation underlies all changes (*Prm*. 162d-163b).

Thus, Melissus aligns with the Eleatic tradition by excluding all forms of change and motion from What-is, and he also regards them as generative, similar to Parmenides. Furthermore, compared to his Eleatic predecessors, Melissus' understanding of change bears a resemblance to Plato in several aspects. Firstly, in contrast to Parmenides, Melissus delves into greater detail regarding how a change effectively leads to generation for What-is, or what such generation would entail. In this fragment, he argues that every change or affectation experienced by What-is results in the destruction of What-is and the generation of a new What-is from What-is-not. In other words, at the moment of such a change, a new being is generated which supplants the disappearing old one. This may inspire the speech of Diotima in the *Symposium*, in which she claims that every mortal thing is always being renewed and becoming a new thing with some aspects passing away and being replaced (*Smp*. 207d2-208b2).

Secondly, as a response to Heraclitus, Melissus accepts his flux theory as a proper empirical description of the world, but he asserts that it does not represent the fundamental truth of the world. He is reported to claim:

> For if earth exists and water, air, iron, gold, fire, the living and the dead, black and white, and the other things of which humans say that they are true…then it is necessary that each thing of this sort be as it first seemed to us…each one always

> be as it is…**but it seems to us that what is hot becomes cold and what is cold hot, what is hard soft and what is soft hard, that what is living dies and that it comes to be out of what is not living, and that all these things become different…it seems to us that they all become different and change out of what is seen each time**. Hence it is clear that we do not see correctly…For they would not change if they were true, but they would just as each one seemed to us to be…but if it changed, then what is would be destroyed, while what is not would come to be. (Simpl. *In Cael*. 558-559 = DK30 B8. LM translation.)

On the one hand, according to our perception, everything in this empirical world seems to change constantly.[59] Whenever we perceive something, it instantly becomes different. Just like Heraclitus' river which we can never step into it twice, here Melissus further argues that we cannot perceive the same thing twice, emphasizing that all our observations indicate an ongoing process of change. As we have previously discussed, Plato also embraces Heraclitus' view of a world in flux. On the other hand, Melissus, like Heraclitus, emphasizes that change between opposites is the predominant and fundamental characteristic of change. The constant change we perceive in everything typically involves a shift from one attribute, such as cold or soft, to its opposite, like hot or hard. However, Melissus departs from Heraclitus in that he considers all these changes as generative. According to our perception, all things undergo substantial transformations between opposites, and they are immersed in a generative flux. Given Parmenides' principle, which Melissus upholds, that What-is

[59] Barnes, 1982: 299-300.

must always remain true to itself, Melissus concludes that our perception of the world is unreliable.

And the opinion of generative flux definitely reminds us of Socrates' interpretation of Protagoras, Heraclitus and other philosophers' doctrine of change in the *Theaetetus*, where he argues that according to their theory nothing can be called 'one', for when you perceive the object as large or heavy, it suddenly turns to the opposites as small or light (*Theaet*. 152d). Similarly, in Socrates' speech of the *Phaedo*, which we have cited (p. 8), he posits that all things change between opposites, and the processes of these changes are named after 'generation' (*Phd*. 70d-72b).

Therefore, at present, it is evident that Melissus' and Plato's critical ideas concerning change are quite close to each other. Specifically, they both accept Heraclitus' flux theory as a partial description of our empirical world. According to our sensory perception, all things constantly undergo changes between opposites. Moreover, in light of Parmenides' principle, they recognize that all types of changes and motions are generative. Consequently, they both acknowledge that if our sensory perception is trustworthy, all perceptible objects are subject to various forms of generation. However, it is essential to note that this metaphysical judgment does not originate with Heraclitus but is a result of the Eleatic analysis of What-is.

Plato himself appears to be cognizant of this intellectual progression. In the *Sophist*, the Eleatic stranger categorizes philosophers into two groups concerning their views on Being. He describes "a battle of gods and giants among them". 'The gods' refer to Parmenides and the Eleatic

school, perhaps as well as the theory of forms established in Plato's middle dialogues.[60] As 'the friends of the forms', they advocate that the true being must be immaterial and intellectual. In contrast, 'the giants' insist that only the material can be considered as being (*Soph.* 246a-c). According to the Eleatic stranger, 'the giants,' as the opponent of 'the friends of the forms,' believe that "everything is moving and changing" (249b-d), apparently encompassing Heraclitus and his followers criticized in the *Theaetetus*.[61] Then, Heraclitus and those 'giants' are never argued to claim the generative character of motion. Rather, their opinions are clearly summarized as the belief that beings are material and constantly changing. Those who introduce the issue of generative motion, on the contrary, are the friends of the forms. It is said,

> Therefore, the people on the other side of the debate [i.e. the friends of the forms] defend their position very cautiously, from somewhere up out of sight. They insist violently that true being is certain nonbodily forms that can be thought about. They take the bodies of the other group, and also what they call the truth, and they break them up verbally into little bits and call them a process of coming-to-be instead of being (ἐν τοῖς λόγοις γένεσιν ἀντ᾽ οὐσίας φερομένην τινὰ προσαγορεύουσιν). (*Sph.* 246b6-c2)

Obviously, 'the giants' themselves do not declare that material beings are always generatively changing. But under the perspective of the friends of the forms, the changing things do not possess any diachronic self-identity

[60] Cornford, 1935: 242-8; Bluck, 1975: 94-101; de Rijk, 1986: 102.
[61] Cornford, 1935: 241.

and they are merely “little bits”. This suggests it is they who treat change and motion as generative. Their position is further confirmed by what the Eleatic stranger claims several lines later, “You [i.e. the friends of the forms] say that being always stays the same and in the same state, but coming-to-be varies from one time to another.” (τὴν ὄντως οὐσίαν, ἣν ἀεὶ κατὰ ταὐτὰ ὡσαύτως ἔχειν φατέ, γένεσιν δὲ ἄλλοτε ἄλλως. 248a11-13) Since What-is always is according to the Eleatic doctrine, the changing sensible entities cannot be What-is but only the “little bits” as the result of the generative process of change.

Consequently, it becomes evident that Plato recognizes that the insight into generative change belongs to the Eleatics. To summarize, early Ionian thinkers initially identified the pattern of change between opposites as a fundamental aspect of change. Over time, this pattern evolved into the central principle of Heraclitus’ philosophy, where all things are in constant flux, exemplified by his river fragments. In contrast, the Eleatics, guided by their principle that What-is always is, perceive all forms of change and motion as generative and unsuitable for What-is. Melissus’ arguments underscore his alignment with the Ionian thinkers: He acknowledges the Ionian pattern of change between opposites and Heraclitus’ general flux theory as a suitable description of the empirical world perceived through our senses. However, he also maintains that this observation is illusory because What-is remains immutable.

As demonstrated, Plato also inherits these legacies to a certain extent. On one hand, he acknowledges the pattern of change between opposites and the general flux observed in the material world through our senses. On the other hand, he considers these changes, sometimes even including

spatial motion, as generative. Nevertheless, this does not imply his complete acceptance of Eleatic theories and judgments. The pre-Socratic philosophers provide Plato, as well as his audience, with a description of the empirical world: a sensory world characterized by generative and constant changes. Plato must decide whether to fully embrace this perspective or to reject it, either partially or entirely, with a systematic solution to the challenge posed by the Eleatics: how can What-is move or change?

2.2 The Pluralists and Another Alternative

Plato is not the only thinker faced with this critical problem. In the fifth century, the Pluralists, exemplified by figures like Anaxagoras, Empedocles, and their adherents, grapple with a similar dilemma. They indeed embrace Parmenides' foundational principle that What-is always maintains its existence, leading them to reject the notions of coming into being and passing away of What-is. However, their stance is not as rigorous as that of the Eleatic philosophers. They are hesitant to outright deny the ever-changing empirical world and the existence of mutable entities. Consequently, they propose a compromised solution founded on mixed change. They postulate the existence of plural or even limitless What-is or entities that inherently undergo neither generation nor destruction. Instead, they assert that the generation and alteration we perceive in the world are manifestations of the combination and separation of these beings.[62] This perspective allows them to acknowledge the reality of the changing world to some degree, rather

[62] Cf. Vlastos, 1950: 36-39; Guthrie, 1965: 271, 281; Furley, 1976; *KRS*: 351; Curd, 1998: 127-128; 2007: 73; Inwood, 2001: 24-33; Sisko on Anaxagoras, 2014: 54. *Contra*, Palmer, 2009: chp.6-7; Sisko on Empedocles, 2014: 61.

than dismissing it as a mere illusion, as Melissus does. This viewpoint potentially serves as a source of inspiration for Plato. Nonetheless, their interpretation of the immutability of What-is differs somewhat from that of the Eleatics. Unlike the Eleatics, the Pluralists do not categorically consider all forms of motion as generative, nor do they rule out every form of motion. This distinction arises from their understanding of Parmenides' doctrine of the self-identity of What-is, which they interpret in a predicative sense rather than the absolute sense embraced by the Eleatics. This alternative proposed by the Pluralists underscores the profound influence of Parmenides' doctrine, shaping the framework for discussions on change and motion prior to Plato's era.

For instance, Anaxagoras is recorded as stating,

> The Greeks do not think correctly about coming-to-be and passing-away; for nothing comes to be or passes away, but is mixed together and dissociated from the things that are (ἀπὸ ἐόντων). And thus they would be correct to call coming-to-be mixing-together and passing-away dissociating. (Simpl. *In Phys.* 163.20-24 = DK59 B17. Curd translation.)

This fragment is widely recognized as a reflection of Parmenides' profound influence on Anaxagoras. Much like Parmenides, Anaxagoras repudiates the concepts of generation and destruction concerning What-is. The perceived generation or destruction of macroscopic objects, such as flowers or cats, according to Anaxagoras, amounts to nothing more than the mixing and separation of various constituent What-is, serving as the fundamental components of these objects. These ingredients encompass

opposing qualities like hot and cold, wet and dry (Cf. Simpl. *In Phys*. 34.20-27 = DK59 B4b) as well as flesh, bones and other similar things (Cf. Arist. *Cael*. 302a28-b5 = DK59 A43).[63] Therefore, in the birth of a cat, for instance, Anaxagoras believes that the bones, tissues and fleshes do not come-to-be or pass-away but remain ungenerated. Although the cat as a whole appears to be generated, Anaxagoras contends that this is not a genuine process of generation but merely the aggregation of non-generative constituents. This perspective is further illuminated by the following doxography:

> When Anaxagoras discovered the old belief that nothing comes from that which is not in any way whatsoever, he did away with coming-to-be, and introduced dissociation in place of coming-to-be. For he foolishly said that all things are mixed with each other, but that as they grow they are dissociated. For in the same seminal fluid there are hair, nails, veins and arteries, sinew, and bone, and it happens that they are imperceptible because of the smallness of the parts, but when they grow, they gradually are separated off. 'For how,' he says, 'can hair come from what is not hair, and flesh from what is not flesh?' He maintained this, not only about bodies, but also about colours.

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[63] Concerning what exactly are the ingredients or fundamental things, cf., Curd, 1998: 131-141. I am convinced by her arguments that the ingredients include opposites, some natural substances, and the ingredients of organic objects, while excluding entire physical objects. Besides, I also concur with her perspective on how Anaxagoras substantiates his claim that What-is does not undergo generation or destruction. *Contra*, some scholars reduce the ingredients to the opposites alone, such as, Vlastos, 1950; Marmodoro, 2017: 12-17. And some others, on the contrary, make no clear distinction between the ingredients (What-is) and the macroscopic objects we perceive, exemplified by Strang, 1963; Guthrie, 1965: 279-294; Barnes, 1982: 320-326.

> For he said that black is in white and white in black… (Scholium in Greg. Naz. *Patrologia Graeca* 36 911 Migne = DK59 B10. Curd translation.)

Therefore, the hair cannot be anything other than hair, and this is the same for flesh or any other ingredients. In comparison to Parmenides' fundamental doctrine that What-is maintains an eternal and unchanging essence, Anaxagoras offers a subtly distinct interpretation. For him, since What-is cannot transform into something entirely distinct, it is permissible for it to undergo change without fundamentally altering its essence. In other words, the constituent elements can experience growth and expansion through mixing, and conversely, they can undergo decay and reduction through separation. Consequently, the body, as an assemblage of these constituent elements, is merely a product of their mixing and separation. However, the question arises: How can this theory ensure that What-is and macroscopic objects altogether evade genuine generation and destruction? According to Anaxagoras' doctrine, there exists the notion that 'everything is in everything', or, 'in everything there is a portion of everything' (Simpl. *In Phys*. 164.22-165.1 = DK59 B6+B11+B12). And further, he also advocates that there is neither a smallest nor a largest among the ingredients (Simpl. *In Phys*. 164. 14-22 = DK59 B3). In other words, one can always find a smaller component within a small one. Thus, regardless of how the constituent elements and macroscopic objects are separated, they would never be reduced to nothingness.[64] Consequently, in the strictest sense, true generation and destruction are deemed impossible.

[64] Cf. Curd, 1998: 148.

Moreover, Anaxagoras' interpretation of the Parmenidean doctrine also leads to the rejection of qualitative change. As alluded to in B10 cited above, just like flesh and hair do not come from what is not flesh and hair, according to Anaxagoras' acceptance of Parmenides' idea, black must come from what is black and white must come from what is white.[65] This perspective suggests that akin to Parmenides, Anaxagoras also considers qualitative change as a form of generation of What-is. Moreover, concerning macroscopic objects, there exists no generative alteration since their qualitative changes are reduced to the mixing and separation of ingredients. These constituent elements collectively contribute to the various characteristics that a macroscopic object may exhibit, such as being hot or cold, dry or wet, and so forth (Cf. Simpl. *In Phys*. 155.23-30 = DK59 B1). Therefore, any qualitative change in a macroscopic object signifies a shift in the proportions of ingredients brought about by mixing or separation. For example, if a white cat turns black, it is due to an increase in the proportion of black constituent elements, rather than the black constituent elements themselves changing into white.

Hence, Anaxagoras rejects all forms of generative change. Although, as observed, Anaxagoras seemingly embraces Parmenides' doctrine that What-is always is and cannot become different, his understanding of this principle exhibits nuanced deviations from Parmenides and the Eleatic philosophers. On one hand, contrary to the Eleatics, Anaxagoras does not universally categorize all forms of change and motion as generative. While he disallows generation *ex nihilo* and qualitative change, he does permit quantitative changes of What-is, such as combination and

[65] As Furley points out, Anaxagoras takes the Parmenidean principle in a very strong sense that "nothing comes-to-be out of what *it* is not." Cf. Furley, 1976: 64.

separation, growth and diminishment. Moreover, he acknowledges the spatial motion of What-is, as exemplified by rotation (cf. Simpl. *In Phys*. 156.13-157.4 = DK59 B12). This perspective suggests that Anaxagoras interprets Parmenides' doctrine of What-is primarily in a predicative sense. In other words, he asserts that changes like increase, decrease, and spatial motion do not necessitate What-is transforming from F to not-F, hence they do not entail a process of generation. From Anaxagoras' viewpoint, a cup of hot tea, for instance, does not undergo a generative change by becoming hotter or colder when heated or by moving from one location to another. Thus, these types of changes are not considered generative by Anaxagoras. In contrast, for Parmenides and the Eleatics, any form of change implies a generative process since it invariably undermines the strict and absolute self-identity of What-is

Although it is premature to conclusively determine whether Plato's own theory aligns more closely with the Eleatics or Anaxagoras on this matter, it is apt to engage in some preliminary comparisons. Plato undeniably regards quantitative changes as generative in the *Symposium* as well as other middle dialogues. As evident in Diotima's discourse, no matter how minimal a change may be, it is perceived as a generative process that erodes an entity's identity and unity. In this regard, Plato unequivocally aligns with the fundamental tenets of the Eleatics. However, it should be noted that Plato permits certain changes and motions not to be generative, as exemplified by his treatment of the soul's motion in the *Phaedo*, *Phaedrus*, and the *Laws*. It is because Plato's systemic theory of change is complicated and dialectical. We will not deal with those cases in the meantime, and our current focus pertains solely to the context and initial standpoint of Plato's philosophical exploration of change and motion.

And in the *Symposium*, one of the earliest dialogues dedicated to this topic, Plato unequivocally embraces Parmenides' original concept of absolute What-is and lays the groundwork for his subsequent ontological investigations. Further examination of this topic will be revisited in the following chapter.

On the one hand, unlike Melissus and possibly Parmenides, Anaxagoras does not consider everything as genuine What-is; instead, he designates only certain constituents as What-is, while regarding macroscopic objects, which result from the mixture of these constituents, as not being true beings.[66] This dichotomy results in a metaphysical and epistemological innovation. As demonstrated earlier, Parmenides dismisses changes in What-is as mere mortal opinions, and Melissus goes further to perceive the constantly changing world, as reported by our senses, as pure illusion. Conversely, Anaxagoras suggests that our perception of the empirical world is not illusory. Although the macroscopic objects we perceive are not genuine What-is and are subject to generation and destruction, they still exist and undergo temporary change. To illustrate, consider once more the example of a cup of hot tea. Melissus would deny the possibility of such a cup, as a What-is, becoming hotter or colder, asserting that What-is always remains unchanged. However, Anaxagoras contends that such changes can indeed occur because the cup itself is not a true being. This viewpoint aligns with Parmenides' principle without entailing the impossibility of change. Even though Anaxagoras' formulation may not have directly influenced Plato, it bears a remarkable resemblance to Plato's perspective in his dialogues. Undoubtedly, in the *Republic*, the entity undergoing a generative change is not a genuine Being, nor is it

[66] Cf. Curd, 2007: 72-73.

complete nothingness—it falls somewhere between true What-is and pure What-is-not (i.e. *Rep*. 478e). The external world undergoes perpetual change as perceived by us, yet the concealed true What-is remains immutable.[67]

Empedocles, although marked by certain distinctions, expounds a very similar theory to Anaxagoras. Empedocles also does not outright deny the reality of the changing external world apprehended by our senses, nor does he wholeheartedly rely on sensory perception. He posits that for most mortals, the knowledge attainable through the senses is limited and incomplete—although the power of each sense organ is unique and irreplaceable, while as *KRS* rightly points out, Empedocles still promises that the perceptions somehow could reveal each thing in a clear way by a careful and discriminating use of them under his guidance (Sext. Emp. *Adv. Math*. 7.124 = DK31 B3; also cf. Sext. Emp. *Adv. Math.* 7.122-124 = DK31 B2).[68] This limited reliance on sensory perception appears to partially embrace Heraclitus' portrayal of the ever-changing world:

> And these things never cease from constantly alternating,
> At one time all coming together by love into one,
> And at another time again all being borne apart separately by the hostility of strife.
> …
> [I]n this respect they come to be and have no constant life;
> But insofar as they never cease from constantly interchanging,
> in this respect they are always unchanged in a cycle. (Simpl. *In*

[67] Other attempts to construct the metaphysical relationship between Anaxagoras and Plato, cf. Brentlinger, 1972; Furley, 1976: 80-83, etc.
[68] *KRS*, 285.

Phys. 158 = DK31 B17.6-13. Inwood translation)

Much like Heraclitus, Empedocles shares the belief that all objects perceived in the empirical world are in a perpetual state of flux. This perspective paints a picture of a world characterized by unceasing processes of generation and destruction. According to Empedocles, each act of generation involves a dual birth of the mortal and also a double death. For when a fresh entity comes to be, the previous one or ones must pass away.[69] Nevertheless, akin to Anaxagoras, Empedocles derogatorily labels those who advocate for the concepts of generation and destruction as fools (Plut. *Adv. Col.* 12 1113C = DK31 B11). In his view, the instances of generation we perceive are not entirely genuine; instead, they represent combinations and separations of authentic beings, as he articulates,

> I shall tell you something else. There is no growth of any of all mortal things
> nor any end in destructive death,
> but only mixture and interchange of what is mixed
> exist, and growth is the name given to them by men. (Aët. 1.30.1 = DK31 B8. Inwood translation)

Macroscopic objects, as compounds, undergo processes of birth and death. However, they do not represent genuine beings; hence, their birth and demise do not constitute authentic acts of generation but rather the mixing or separation of entities. True entities, in contrast, remain exempt from both generation and destruction. Empedocles takes a dual stance: he

[69] Cf. Furley, 1987: 84.

rejects complete generation and destruction of beings (Plut. *Adv. Col.* 11 1113A-B = DK31 B9; Ps.-Arist. *MXG* 2 975a3-4 = DK31 B12; Simpl. *In Phys.* 158 = DK31 B17.30-35). Additionally, he categorically denies the possibility of any alterations in these entities. This is grounded in the claim that each being or What-is, being equal in age and character to others, possesses a distinct prerogative and unique character (Simpl. *In Phys.* 158 = DK31 B17.27-28). Any alteration in the entity inevitably entails the cessation of the old character and the emergence of a new one, thus constituting a form of generation for the being. Consequently, similar to Anaxagoras, Empedocles treats alterations in being as a type of generation and rejects them.

But Empedocles diverges from Anaxagoras by only acknowledging specific types of being, which he designates as 'roots'. Those permanent beings are fire, water, earth, and air (cf. Simpl. *In Phys.* 158 = DK31 B17.18).[70] And the macroscopic objects, as anticipated, are the compounds of those roots under the affection of Love or Strife. Empedocles likens the roots to pigments in the hands of painters, while the natural objects we perceive correspond to the diverse figures created using these pigments (Simpl. *In Phys*. 160 = DK31 B23). It is clear that the pigments or the roots themselves remain unaltered, but their combinations give rise to all mortal things. Empedocles intriguingly assigns the names of four immortal gods to these roots: Zeus, Hera, Aidoneus and Nestis (Aët. 1.3.20 = DK31 B6).

The widely accepted view is that Empedocles adheres to Parmenides' doctrine of What-is and thus regards the roots or What-is as unchanging,

[70] The terms of Empedocles for the four roots, cf. Wright, 1981: 23.

ungenerated, and deathless.[71] However, in line with our earlier discussion of Anaxagoras, Empedocles' interpretation of Parmenides' doctrine deviates slightly from Parmenides' own conception. Although he rejects complete generation (or generation *ex nihilo*), destruction, and qualitative change of beings, Empedocles argues explicitly for the spatial motion of roots. Indeed, he asserts that the roots are continually "running through each other" (Simpl. *In Phys.* 158 = DK31 B17.34). Consequently, it is highly likely that Empedocles, akin to Anaxagoras, interprets Parmenides' theory in a predicative sense, whereas Parmenides himself maintains a more stringent stance, rejecting both qualitative change and spatial motion.

This perspective forms the basis of the Pluralists' response to Parmenides' challenge concerning how beings can undergo change and also illuminates their relationship with Plato. The Pluralists acknowledge that What-is remains devoid of generative changes, while they still allow for spatial change and, conceivably, fluctuations in quantity. This perspective may partly explain why Socrates, in the *Theaetetus*, classifies Empedocles among the scholars who uphold a Heraclitean perspective that opposes Parmenides (*Theaet*. 152e). From Diotima's perspective, certain motions permitted by the Pluralists within What-is still constitute generative changes. Furthermore, the Pluralists do not regard all objects as candidates for What-is. Instead, they recognize only specific beings as authentic and ungenerated, allowing the changes and generations of

[71] Cf. Guthrie, 1965: 146; Curd, 1998: 155; Inwood, 2001: 31, etc. *Contra*, some scholars only admit that the beings are unchanging in a qualified way, for in the cosmogony they are generated and destroyed when they are submerged in the '*Sphairos*' and separated from it. Cf. Wright, 1981: 22-40; Osborne, 1987: 38-44; Sisko, 2014: 61. Palmer even denies that the beings are ungenerated at all, cf. Palmer, 2009: 279-298; 2016.

macroscopic objects because these transformations are merely the combination and separation of fundamental entities. This nuanced approach enables them to refrain from outrightly dismissing our perception of the empirical world as pure illusion, a perspective that might have influenced Plato.

This pattern of thought appears to have exerted considerable influence in the late fifth century before Plato's era. For instance, in the *Hippocratic Corpus*, we can find that the author of the *On Ancient Medicine* voices criticism against certain doctors and sophists of his time who erroneously prioritize understanding the nature of human beings as the foundation of medical skill. The author attributes this misguided emphasis to the teachings of figures like Empedocles and others regarding the nature of being. Further, according to this author, those doctors also imply the philosophy of "what the human being is and how it originally came to be and from what things it was compounded."[72] (*VM* 20.1. Schiefsky translation) Clearly, the influence of the Pluralists can also be discerned in the works of other medical writers. For instance, the author of *On Regimen* argues in a manner consistent with Pluralism that all things are in a state of flux through exchange (*Vict.* 1.5). The author further claims, "So of all things nothing perishes, and nothing comes into being that did not exist before. Things change merely by mingling and being separated."[73] (*Vict.* 1.4. Jones translation. Also cf. *Vict.* 1.3) These texts clearly demonstrate the connection between these writers and Pluralist theory. They both accept Parmenides' doctrine that What-is always is and

[72] Cf. Schiefsky, 2005: 30-33; 293-298.

[73] Plato might be familiar with this essay. For as argued by Craik, Plato uses the idea of *On Regimen* in the speech of Eryximachos in the *Symposium*. Cf. Craik, 2001; 2014: 275.

never becomes What-is-not and interpret the generation and destruction of macroscopic objects as a combination and separation of What-is. Thus, it is evident that the author of *On Regimen* and similar medical writers inherit this perspective from the Pluralists. Indeed, Jones aptly points out that *Vict* 1.4 cited above is "almost verbally the same as a fragment of Anaxagoras" (DK59 B17).[74]

And there are also several other philosophers activating in the late fifth century who seemed to accept, at least partly, Parmenides' principle of being, aligning themselves closely with the Pluralists. Philolaus, a member of the late fifth-century Pythagorean School, expounded the notion that "the being of things, which is eternal, and nature itself admit knowledge that is divine and not human, except that it would have been impossible for any of the things that exist and are known by us to come to be…" (Stob. 1.21.7d = DK44 B6. LM translation) Philolaus asserted that the being of things is eternal and serves as the necessary condition for the generation of all things. This argument is widely recognized as reflecting the influence of the Eleatic school.[75] However, since Philolaus, much like the Pluralists, only rejects the generation of genuine beings, his interpretation of Parmenides' principle may be more in line with the perspectives of Anaxagoras and Empedocles.

Likewise, Diogenes of Apollonia is seen as a synthesis of the Eleatic principle of What-is and the old Milesian monism.[76] Diogenes argues that "all the things that are are differentiated out of the same thing and are the same thing…for if the things that exist now in this world—earth,

[74] Jones, 1959: 235.
[75] *KRS*, 328; Kahn, 2001: 24-25.
[76] Barnes, 1982: 568.

water, air, fire, and all the other things…if any one of these were different from the other, being different by its own nature…it would not be possible in any way either that things would mix with one another or that benefit or harm to the other, or that any plant could grow from the earth either, or any animal or anything else come to be…" (Simpl. *In Phys*. 151-152 = DK71 B2. LM translation) In his theory, being is singular and eternal, eschewing both generation and destruction (Simpl. *In Phys*. 153.19-22 = DK71 B7+B22). While this idea bears a resemblance to the philosophies of Parmenides and Melissus, it can also be regarded as a monistic argument against the Pluralism of Anaxagoras and Empedocles. Nevertheless, Diogenes' theory remains closely connected to the metaphysical framework of the Pluralists. On one hand, like the Pluralists, he selectively designates only specific things as candidates for being, enabling him to accept the generation of macroscopic objects. On the other hand, any generation devoid of genuine beings can only be viewed as creation *ex nihilo*, as genuine beings evidently undergo numerous changes.

Therefore, the Pluralists' theory gained significant traction in the latter part of the fifth century. Although Plato did not fully embrace their conception of the predicative sameness of What-is, the prevalence of Pluralism underscored the enduring influence of Parmenides' principle of What-is, which proved too potent to be disregarded by the philosophers of that era. Consequently, it serves as the contextual backdrop and point of departure for Plato's philosophical exploration.

3. The Motion of the Immortal Soul

Another crucial facet to consider is the motion of the Soul. It is a widely

accepted view that Plato espouses the notion that the immortal soul is perpetually in motion and possesses self-moving characteristics, a position underscored by Socrates in the *Phaedrus*:

> Every soul is immortal. That is because whatever is always in motion is immortal (ψυχὴ πᾶσα ἀθάνατος. τὸ γὰρ ἀεικίνητον ἀθάνατον), while what moves, and is moved by something else stops living when it stops moving. So it is only what moves itself, since it does not leave off being itself, never desists from motion. In fact, this self-mover is also the source and spring of motion in everything else that moves; and a source has no beginning. That is because everything that is generated must generate from a beginning (ἐξ ἀρχῆς γὰρ ἀνάγκη πᾶν τὸ γιγνόμενον γίγνεσθαι), but the beginning is not generated from anything; since if a beginning were generated from something, it would no longer be the beginning. And since it is ungenerated, then necessarily it cannot be destroyed (ἐπειδὴ δὲ ἀγένητόν ἐστιν, καὶ ἀδιάφθορον αὐτὸ ἀνάγκη εἶναι). That is because if the beginning were destroyed, it could never get started again from anything else and nothing else could get started from it—that is, if everything generates from a beginning. This is then why a self-mover is a beginning of motion. And that is incapable of being destroyed or generated, otherwise all heaven and everything that has been generated would collapse, come to a stop, and never have cause to start moving again. But since we have found that a self-mover is immortal, we should have no qualms about declaring that this is the very essence and principle of a soul, for every bodily object that is moved from

> outside has no soul, while a body whose motion comes from within, from itself, does have a soul, that being the nature of a soul; and if this is so—that whatever moves itself is essentially a soul—then it follows necessarily that soul should have neither birth nor death. (*Phdr*. 245c5-246a1, adapted)

In this renowned passage, Socrates asserts that the soul is in a perpetual state of motion, with the capacity to move both itself and others. This inherent quality of ceaseless motion renders the soul immortal, as it remains unaffected by generation or destruction. To elaborate further, the soul's immortality is contingent upon its constant self-movement and its ability to impart motion to others. A parallel argument resembling this can be identified in Plato's *Laws* X. And it is also hinted at in various other dialogues, such as the discussions on the immortality of the soul and its capacity to induce motion in others found in the *Phaedo* and the *Timaeus*.

While this detailed argument presented in the *Phaedrus* is undeniably a product of Plato's unique philosophical vision, the concept of a self-moving and consequently eternal soul, as portrayed here, is often attributed to Alcmaeon by scholars.[77] There exist two prominent doxographies of Alcmaeon expounding upon the nature of the self-moving and eternal soul:

> Alcmaeon…says that it [i.e. the soul] is immortal because it resembles the immortals. This belongs to it because it is always in motion. For everything that is divine always move continually: the moon, the sun, the heavenly bodies, and the

[77] Cf. Skemp, 1942: 5-6; Barnes, 1979: 116-118; *KRS*, 347; Hankinson, 1998: 32-33.

whole heavens. (Arist. *DA* 405a29-b1 = DK24 A12. LM translation)

Alcmaeon: [i.e. the soul is] a nature that moves itself with an eternal motion, and it is for this reason that he thinks that it is immortal and similar to divine things. (Aët. 4.2.2 = DK24 A12. LM translation)

Aristotle's doxography offers what some consider to be 'an unimpressive analogy'. According to his testimony, Alcmaeon's soul is perpetually in motion, akin to the celestial bodies of the divine realm. This constant motion appears to be intrinsic and indispensable to immortality, suggesting that what is immortal is inherently characterized by perpetual movement. Consequently, the soul is established as eternal and imperishable. Of particular interest to most scholars is the testimony provided by Aëtius, as it not only underscores the soul's eternal motion but also lays the foundation for Alcmaeon's argument regarding the self-motion of the soul. Aëtius' account implies a more intricate line of reasoning. As Barnes highlights, Aëtius' case does not hinge on a comparison between the soul and the divine celestial bodies; instead, it asserts that if the soul is self-moving, it operates autonomously, devoid of external impetus. Such a self-moving entity is unquestionably alive, implying that continuous motion equates to immortality for the perpetually moving soul.[78]

However, Mansfeld persuasively argues that Aëtius' testimony does not authentically represent Alcmaeon's original theory. Upon meticulous

[78] Barnes, 1982: 116-120. Also cf. Hankinson, 1998: 30-33.

examination of the context in Aëtius' text, Mansfeld contends that this account is a misguided paraphrase of Aristotle's doxography. According to Aristotle's report, Alcmaeon solely posits the eternal motion of the soul, with Plato being the proponent of the notion of self-motion in the soul. The concept of self-motion appears to be a misattribution to Alcmaeon, projected onto him by Aëtius and originating from Plato and Xenocrates.[79] The reconstruction based on Aristotle's report may probably be closer to Alcmaeon's own idea. Therefore, Plato may not inherit the self-motion of the soul from his predecessors, at least not from Alcmaeon.

In light of this, what precisely does Plato glean from the pre-Socratic philosophers concerning the nature of the soul's motion? Mansfeld provides an intriguing comment that Socrates' view of the eternally moving soul "derives an entity's (i.e. soul's) being ungenerated and indestructible from its being always in movement, whereas according to the Eleatics, an entity's (i.e. Being's) ungeneratedness and indestructibility make it immobile and changeless. A combination of eternal mobility on the one hand and being both ungenerated and indestructible on the other was of course investigated by the Atomists and, to a lesser extent, Empedocles. A certain affinity between this Platonic soul and Anaxagoras' *nous-qua-moving-cause* cannot be denied either."[80] Namely, Plato is inspired by Anaxagoras' idea of the soul as the cause of moving others, and that the soul can be both moving eternally and being ungenerated comes from the Atomists and Empedocles. Such theory of the Atomists and Empedocles is suggested to be a combination of the

[79] Mansfeld, 2014.
[80] Mansfeld, 2014: 1.4.

eternal mobility of the soul and the Eleatic metaphysics on the ungeneratedness of Being.

Thus, as Mansfeld pointed out, the most important aspects of the soul are: the eternal mobility, the immortality, and its ability to move others. We are now able to further examine the whole intellectual history of the opinion that the immortal soul is always moving and even moving others. Let's return to the early phase of Greek philosophy again. Aëtius claims that Thales is the first philosopher who considers always-moving and self-moved as the nature of the soul (Aët. 4.2.1 = Th360 = DK11 A22a). It might come from Aristotle's testimony:

> Thales too, to judge by what is reported, seems to have held that the soul causes motion, since in fact he said that the magnet has a soul because it moves iron. (Arist. *DA* 405a19-21 = Th31 = DK11 A22. McKirahan translation)

As suggested by the case of the magnet, Thales believes that whatever has the ability to move other bodies without being compelled by any external force must have a soul inside. Although he may not go so far as to support the idea of the self-moved soul just as what is asserted by Aëtius, this testimony does imply the close and necessary connection between soul and motion. Thales, then, opines that the soul originates the external objects by its nature.[81] What's more important, Plato himself seems to acknowledge Thales' idea of the soul's ability to move others. In the *Laws* X, the Athenian cites the saying "all things are full of gods" as a confirmation of the theory that the souls, like the gods, cause the motions

[81] Cf. Pinto, 2016: 245-246.

of the heavenly bodies (*Laws*, 899b). And this saying is clearly attributed to Thales by Aristotle (Arist. *DA* 411a7-8 = Th32 = DK11 A22).[82]

However, the available material does not provide conclusive evidence regarding whether Thales subscribed to the idea of an eternally moving and immortal soul. His Ionian followers, Anaximander and Anaximenes, may offer more nuanced perspectives, particularly if a deity can be interpreted as a form of soul in their philosophy. Anaximander's *apeiron*, as the fundamental principle of everything, is declared to be eternal and perpetually in motion:

> He said that the principle of beings is a certain nature, that of the *apeiron*, from which the heavens come about and the world that is in them. It is eternal and unaging (ἀίδιον…καὶ ἀγήρω) and it surrounds all the worlds…Besides this, there is an eternal motion, in which the birth of the heavens comes about. (Hippol. *Ref.* 1.6 = DK12 B2 = TP2 Ar75. LM translation, adapted)

Thus, the *apeiron* undeniably entails perpetual motion as it envelops and encompasses the world. By its eternal motion, all the heavens generate from the unlimited *apeiron*. Indeed, Aristotle also reports that the *apeiron* "surrounds all things and steers all" (Arist. *Phys*. 203b = DK12 B3 = Tp2 Ar2). The *apeiron*, therefore, is continuously engendering and guiding. And at the same time, it enjoys immortality, for this principle is described as "eternal and unaging". Those words, as *KRS* pointed out, are likely attributed to Anaximander himself. Additionally, the usage of similar terms to depict the gods in the Homeric epics suggests that Anaximander

[82] A summary of various possible readings on this saying, cf. Pinto, 2016: 250-255.

extends the immortality associated with the Homeric gods to the *apeiron*.[83] In fact, Aristotle remarks that the deathless and imperishable nature of Anaximander's principle is akin to the divine (DK12 B3). Most significantly, these accounts indicate that Anaximander conceives of the *apeiron* as a god. And the god is certainly a soul. If this interpretation is accurate, then the *apeiron*, characterized as a great soul or a god, possesses both immortality and perpetual motion.

A clearer edition could be found in Anaximenes' philosophy. According to Anaximenes, air serves as the fundamental principle from which all things emerge through processes of condensation and rarefaction. Cicero's writings report that air, in Anaximenes' philosophy, maintains eternal motion and is regarded as a deity:

> Anaximenes declared that air is god, that it is born, and that it is immense and unlimited and always in motion (*infinitum et semper in motu*). (Cic. *Nat. deor.* 1.10.26 = DK13 A10 = TP2 As17. LM translation)

Aëtius also reports Anaximenes' belief that air is considered a god.[84] When comparing Anaximenes' views to Anaximander's somewhat obscure stance, it becomes evident that Anaximenes subscribes to the notion of a perpetually moving god, a soul that is in a perpetual state of motion and generation.

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[83] *KRS*, 117.

[84] Aët. 1.7.13 = DK13 A10 = TP2 As119. However, Aëtius continue says that it is because the "powers traverse the elements or the bodies." This interpretation is Stocizied and not authentic. Cf. Mansfeld, 2018: 170-171.

Indeed, even Xenophanes represents a relevant idea. While Xenophanes vehemently rejects spatial motion, he asserts that the god is characterized by a multitude of activities. According to Sextus Empiricus' testimony, the god is described as seeing, thinking, and hearing all things (Sext. Emp. *Adv. Math*. 9.144 = DK21 B24). Moreover, as previously cited, the god "makes all things tremble" without any movement (DK21 B25). Consequently, if the god is regarded as a soul, it perpetually acts and initiates motion and generation among mortals.

In summary, these early Greek philosophers suggest that the immortal god, envisioned as a soul, is perpetually in motion and instigates motion in others. Unfortunately, there is insufficient evidence to determine whether these philosophers held the same view regarding the human soul. Scholars normally trace the immortality of the human soul back to the Orphic faith[85], or to Pythagoras. According to Pythagoras, the human soul is immortal and subject to transmigration, persisting beyond death and potentially reincarnating into the body of a human or even an animal[86]—Herodotus attributes the origin of Pythagoras' idea to the Egyptians (Hdt. 2.123 = DK14.1), which however may not be credible. As Burkert convincingly claims, Pythagoras' idea of the immortal human soul represents a revolutionary departure from Homer's view of the soul as a powerless phantom in Hades. Furthermore, the term 'deathless' was used by Homer to describe the gods, but Pythagoras attributes this character to the soul of human beings.[87] Empedocles appears to support the transmigration of the soul, as it is caught in a cycle of incarnation and considered immortal (cf. Plut. *Exil*. 17 607C = DK31 B115+B119; Diog.

[85] Skemp, 1942: 7-8.
[86] Barnes, 1982: 100-106; *KRS*, 220.
[87] Burkert, 1985: 300. Also, cf. Kahn, 2001: 18.

Laert. 8.77 = DK31 B117; etc.). As previously discussed, Alcmaeon argues that the human soul, like the divine, is perpetually in motion, and consequently, it is immortal.

Then, Anaxagoras brings forward the well-known idea of *nous-qua-moving-cause*. According to Anaxagoras, the nous, which evidently encompasses the human soul, serves as the catalyst for all motion and the generation of all things (Simpl. In Phys. 156-157 = DK59 B12). This idea is also mentioned by Plato in the *Phaedo*. And Anaxagoras claims that the nous is "self-ruled" (αὐτοκρατές) and it controls all things including those which have souls (DK59 B12), which may somehow suggest that the soul is believed to be self-moved. Besides, Anaxagoras' nous or soul is undoubtedly immortal and eternal. As previously discussed, Anaxagoras rejects genuine generation and destruction in his theory, influenced by his acceptance of Parmenides' principle of being. Given that he interprets this principle in a predicative sense, as argued earlier, Anaxagoras permits all genuine entities—the ingredients and the nous—to undergo spatial or non-generative motions while remaining ungenerated at the same time. Therefore, from Anaxagoras' perspective, the soul is immortal and possesses the capacity for motion. It serves as the prime mover of all other entities and may even be self-moved.

In conclusion, Plato is situated within a longstanding tradition that posits the immortality of the soul, whether divine or human, as perpetually in motion. Moreover, at times, the soul is regarded as the ultimate cause of all other motions. As implied by the text of the *Phaedrus* cited at the beginning of this section, Plato seems to accept this tradition thoroughly

without any question. However, as Mansfeld rightly points out, this idea necessitates the belief that the soul "being ungenerated and indestructible from its being always in movement," contradicts the Eleatic understanding of being, where ungeneratedness and eternality precisely results in immobility and lack of motion.[88] As argued earlier, Plato indeed inherits such a notion of being from the Eleatics, creating a conflict between his conception of the soul and the Eleatic-style understanding of being. For instance, in the *Sophist*, the Eleatic Stranger claims, according to 'Friends of the Forms'—alluding to the Eleatics and perhaps the Idealism of middle Platonic dialogues,[89] "being always stays the same and in the same state" (*Sph*. 248a12). But then,

> Stranger: But for heaven's sake, are we going to be convinced that it's true that change, life, soul, and intelligence are not present in that which wholly is, and that it neither lives nor thinks, but stays changeless, solemn, and holy, without any understanding?
>
> Theaetetus: If we did, sir, we'd be admitting something frightening.
>
> Stranger: But are we going to say that it has understanding but doesn't have life?
>
> Theaetetus: Of course not.
>
> Stranger: But are we saying that it has both those things in it while denying that it has them in a soul?
>
> Theaetetus: How else would it have them?
>
> Stranger: And are we saying that it has intelligence, life,

[88] Mansfeld, 2014: 1.4.
[89] Cornford, 1935: 242-8; Bluck, 1975: 94-101; de Rijk, 1986:102.

and soul, but that it's at rest and completely changeless even though it's alive?

Theaetetus: All that seems completely unreasonable. (*Soph*. 248e7-249b1)

Hence, if we uphold the premise that every alteration and motion must entail generation, the notion that the soul, which is in perpetual motion, could be attributed to true being becomes utterly untenable. Consequently, the Stranger must undertake a rigorous re-evaluation of the ontological examination of being to reconcile the inherent nature of being with the soul's eternal motion. Since this predicament is presented within the pages of the *Sophist*, one of Plato's later dialogues, it strongly implies the existence of a potential conflict between the Eleatic conception of being and the dynamic nature of the soul within Plato's philosophical framework.

Now, let us endeavour to provide a concise overview. The early Ionian philosophers unearthed a fundamental pattern within the realm of change: all change takes place between opposites. Heraclitus further expounded that everything resides in a state of perpetual flux, in a continuous oscillation between opposing states. Subsequently, Parmenides and the Eleatic school staunchly maintained that all changes inherently entail generation and cannot be ascribed to the realm of What-is. They contended that any alteration, by its very nature, would undermine the absolute self-identity of What-is, inevitably resulting in a process of generation. Thus, generative change became the quintessential essence of all changes. In light of this, every predecessor of Parmenides was compelled to confront Parmenides' profound challenge: how can Being

undergo change? Parmenides himself responded with an unequivocal and categorical negation, positing that What-is cannot undergo change in any conceivable sense. Melissus augmented this by asserting that our sensory perceptions of constant alterations between opposites in the empirical world, as expounded by Heraclitus, are fundamentally illusory. Anaxagoras, Empedocles, and their intellectual successors concurred in the conviction that What-is could not undergo generative change. However, they adopted a more nuanced interpretation of Parmenides' principle, one that primarily operated in a predicative sense. Furthermore, they acknowledged that our sensory experiences were not entirely deceptive, as the macroscopic objects we perceive are not authentic beings. In this context, Plato entered the discourse, aligning himself with the strict interpretation of Parmenides and the Eleatic school, which upheld the absolute self-identity of Being and rejected generative change. Simultaneously, he concurred with the Pluralists, who posited that these perceptible objects lacked genuine existence. Consequently, Plato maintained that our sensory perceptions were not wholly erroneous. Lastly, Plato upheld the longstanding tradition in Greek philosophy asserting the soul's immortality and perpetual motion, a position that, strictly speaking, contradicts the Eleatic doctrine that What-is remains entirely devoid of motion and change. Collectively, these viewpoints assemble the conceptual framework of the empirical world as conceived by Plato: every perceivable entity undergoes ceaseless motion and transformation between opposing states. These transformations engender generative changes, as they continually alter the nature of the objects in question. Meanwhile, the soul maintains its perpetual motion while retaining its immortal essence. Now, it falls upon Plato to address Parmenides' enduring challenge: how can being partake in change and

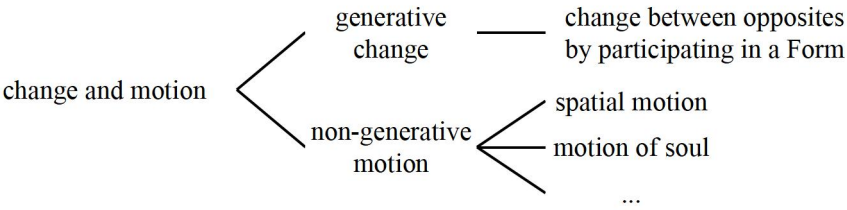
motion?

Chapter II The First Model of Change and Motion in Plato's Middle Dialogues

In the preceding chapter, we have previously posited that Plato encounters the philosophical legacies of pre-Socratic thinkers, specifically their perspectives on change and motion. This includes the following principles and a belief: The early Ionic philosophers unearthed the underlying patterns governing change between opposing forces. Heraclitus, on the other hand, introduced the theory of flux, asserting the constant flux and transformation of all things. Subsequently, the Eleatic philosophers put forth the principle of What-is, which, as we have observed, underpins the generative nature of all motion and change. Furthermore, it is widely accepted that the soul possesses both mobility and immortality. However, Plato does not unreservedly embrace these notions but engages in a deliberate and reflective examination of them. Indeed, they serve merely as the starting point for Plato's inquiry into the nature of change and motion, with his own theory gradually emerging through a protracted dialectical process.

In the middle dialogues, Plato establishes his first model of change and motion step by step. First, in the *Cratylus* and *Symposium*, he elucidates the starting point and introduces the Form. According to this framework, mortal entities are in a perpetual state of flux, whereas the immortal Forms remain immutable. Moreover, all changes inherently involve generation. Then, in the *Phaedo* and the *Republic*, Plato further argues that the Forms serve as the causal explanation (*aitia*) for the generative changes occurring between opposing entities. In essence, sensible entities can only come into existence by participating in the corresponding Form.

This progression not only elucidates the mechanics of generative change but also opens up space for the consideration of non-generative motion. For clearly some motions are not relevant to the participation of Forms. Hence, certain forms of motion, such as spatial motion and the motion of the soul, notably exemplified in the *Phaedrus* and other dialogues, fall outside the purview of generative change.



This model appears to be Plato's first response to Parmenides' philosophical challenge. However, it does not mark the culmination of Plato's explorations. Its notable internal vulnerabilities give rise to a series of robust critiques and reflections within Plato's later dialogues, ultimately laying the groundwork for his second model of change and motion

1. The Variable World and the Stable Forms: The *Cratylus* and the *Symposium*

Firstly, our endeavour shall be to elucidate the underlying phenomena and

character of change and motion as they are elucidated in both the *Cratylus* and the *Symposium*. According to the traditional view, Plato adopts, to some extent, the radical Heraclitean notion of flux, albeit within the confines of sensible particulars. In essence, Plato posits that sensible particulars consistently undergo perpetual changes and motions, while the Forms remain in a state of perpetual stability.[90] This idea is buttressed by Aristotle, who says,

> From his youth [Plato] was familiar first with Cratylus and the Heraclitean opinions that all things are always following and that there is no knowledge about them; **and these things he held even later**. ... For it was impossible that the common definition should be of any sensible things, since they are always changing. (*Metaph*. 987a29-b6)

In this exposition, both Plato and these pre-Socratic philosophers accept the extreme flux to some extent. The distinguishing factor between them lies in the pre-Socratics' failure to acknowledge the existence of unchangeable Forms. However, even if this interpretation is not entirely misguided, it remains somewhat rudimentary and vague in capturing the essence of Plato's genuine thoughts. While Plato does draw upon Heraclitus' theory of flux concerning the sensory and mortal realm, he does not merely replicate Heraclitus' ideas.

In this section, we are going to examine the first step of Plato's own thought. In the *Cratylus*, Plato explicitly critiques Heraclitus' original

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[90] Such as, Cherniss, 1944: 211; 218-219, n.129; Ross, 1951: 18-21; 155-157; Gulley, 1962: 70-76; 130-139. More recently, see Sedley, 2003: 109-12.

theory and reconstructs it by incorporating the Eleatic ontological principle of What-is. Then in the *Symposium*, Diotima reiterates this perspective as she describes the variable and mortal world. In both dialogues, the realm of Forms briefly surfaces as the antithesis of the ever-changing phenomena. Nevertheless, the precise relationship between Form and change, as well as the role of Form in the mechanism of change, remains undisclosed until a subsequent stage.

1.1 The *Cratylus*

The dating of the *Cratylus* remains a subject of considerable controversy, with scholars struggling to reach a consensus on whether it should be categorized among the late dialogues (such as *Sophist*, *Timaeus*, *Laws*), the middle dialogues (such as *Symposium*, *Phaedo*, *Republic*) or other groups.[91] Nonetheless, we prefer to position the theory of Flux within the *Cratylus* among the earliest works within the middle Platonic dialogues. This preference stems from the fact that, in the *Cratylus*, Socrates meticulously expounds on etymologies rooted in Heraclitus' theory of flux, but only briefly alludes to them and introduces the concept of Form at the conclusion of the dialogue in an exceedingly concise and vague manner—he even appears to evade the use of the term Form. This suggests that the audience of this dialogue may not be well-acquainted with Plato's theory of Forms, as expounded in the *Phaedo*, *Republic*, and other middle dialogues. Otherwise, Socrates could have directly presented more extensive details about the theory of Forms and would not have needed to repeatedly argue in the dialogue's final segment about why

[91] Cf. Luce: 1964; Ademollo, 2011: 20-21. Sedley even provides a view, suggesting that the hard core of this dialogue is written before the middle of Plato's middle period, with some certain parts of this dialogue reworked in his late years. Sedley, 2003: 6-14. Ademollo's argument against Sedley, see Ademollo, 2011: 68-70.

Forms do not undergo flux (*Crat.* 439b-440d). Therefore, even if Plato did compose this dialogue during his later period, its primary purpose appears to be laying the groundwork for neophytes in metaphysics who are about to delve into the core curriculum of middle dialogues and theory.

The central objective of the *Cratylus* is to reveal the difficulty of the prevalent Heraclitean doctrine—a principal intellectual adversary both Plato and his audience must contend with at this juncture—behind the etymologies of the name-givers. The contention arises from the belief that the notion of perpetual flux, where everything is in a constant state of change, fundamentally clashes with the concept of Form.[92] Thus, the central inquiries revolve around: What is the Heraclitean doctrine of flux that Plato explores in this context? What is Plato's stance regarding Heraclitus' theory of flux? And why is it incompatible with the Platonic Form? These questions represent Plato's initial efforts to grapple with Heraclitus' notion of flux, which, as previously argued in the preceding chapter, is the most iconic and representative view of the empirical world among the pre-Socratic philosophers.

Let us commence by delving into the Heraclitean doctrine of flux. Concerning this doctrine, a prevailing interpretive trend suggests that the *Cratylus* text hints at two levels of flux: extreme flux and moderate flux, with the former attributed to Heraclitus and the latter to Socrates, and even to Plato himself. Three primary interpretations can be identified, which we may categorize as 'gap readings'. First, the aspectual gap interpretation, as articulated by Ademollo. He posits that Heraclitus'

[92] Cf. Manson, 2016: 94.

theory espouses an extreme flux where everything undergoes perpetual change *in every respect*.[93] According to Ademollo, Plato criticizes this extreme Heraclitean flux while allowing for the possibility of moderate flux in sensible particulars, where changes occur *in some aspects* while stability remains in others. If this interpretation holds, it implies that sensible particulars also possess a degree of stability, as they can undergo changes *in some aspects* while retaining stability in others. Second, the temporal gap interpretation, as advocated by Calvert and others, posits that there exists a middle ground between the absolute rest which is *always* in the same state and the extreme change which is *never* in the same state.[94] In other words, Plato seems to imply, albeit perhaps inadvertently, that the sensible realm can *at times* be in a state of stasis, experiencing change intermittently. Thornton also asserts that 'totally changing' and 'totally unchanging' are *contraries* rather than *contradictories*.[95] Similarly, Baxter claims that Plato does assert that the sensible world is in extreme flux.[96] Barney, too, suggests an intermediate position between extreme flux and absolute stability in Plato's arguments.[97] Third, the ontological gap interpretation, as posited by Manson, proposes that the name-giver actually adheres to the notion of '*flow*' which does not entail substantial and intrinsic change. It is Plato who muddles the moderate '*flow*' and more radical '*flux*'. Manson contends that the concept of flux "entails further that change is chaotic

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[93] Ademollo, 2011: 451. Ademollo elaborates on this viewpoint in a subsequent paper. Cf. Ademollo, 2018. In this paper, he says, '[Plato] must believe that sensible particular enjoy at least some degree of stability'.
[94] Calvert, 1970: 39.
[95] Thornton, 1970: 591.
[96] Baxter, 1992: 176.
[97] Barney, 2001: 155.

and precludes the existence of any abiding thing."[98]

However, all these gap readings encounter difficulties, for there is no indication in the *Cratylus* that Plato endorses the idea of moderate flux in sensible particulars. As we shall soon observe, in the *Cratylus*, Plato does not advocate or imply that sensible particulars exhibit moderate flux by undergoing changes only *in some aspects* or *sometimes*. Manson's interpretation is closer to the text, as it suggests that the original Heraclitean flux theory is compatible with diachronic identity and existence, a notion that Socrates vehemently rejects. Nevertheless, Plato does not conflate extreme *flux* with moderate *flow*; rather, he seeks to demonstrate that the proponents of etymologies and Heraclitus' followers fail to recognize that their 'flow' doctrine inevitably leads to universal and substantial flux. In essence, the notion of moderate 'flow' does not genuinely exist in this text. In order to delve into this argument in greater detail, we will first examine the Heraclitus-style etymologies and subsequently address the concluding argument of the *Cratylus*.

In the *Cratylus*, Socrates meticulously catalogues a vast array of vocabulary terms, providing etymological analyses for each. He contends that through such analyses, one can discern the ancient name-givers' understanding of the essence of the objects they name. As van den Berg points out, those names do not simply mirror reality, but reflect the name-givers' interpretation of reality by dividing the world into groups.[99] Socrates says,

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[98] Manson, 2016: 66.
[99] Van den Berg, 2008: xiv.

> "Most of our wise men nowadays get so dizzy going around and around in their search for the nature of the things that are, that the things themselves appear to them to be turning around and moving every which way. Well, I think that the people who gave things their names in very ancient times are exactly like these wise men. They don't blame this on their own internal condition, however, but on the nature of the things themselves, which they think are never stable or steadfast (οὐδὲν αὐτῶν μόνιμον εἶναι οὐδὲ βέβαιον), but flowing and moving, full of every sort of motion and constant coming into being (ἀλλὰ ῥεῖν καὶ φέρεσθαι καὶ μεστὰ εἶναι πάσης φορᾶς καὶ γενέσεως ἀεί)…Perhaps you didn't notice that they are given on the assumption that the things they name are moving, flowing, and coming into being (φερομένοις τε καὶ ῥέουσι καὶ γιγνομένοις)." (411b4-c10)

Namely, the name-givers, who embrace the Heraclitean doctrine of flux, operate under the assumption that everything is perpetually in a state of motion, flowing and coming into being. According to Socrates, they hold the belief that the entities they designate are subject to ceaseless and profound change. However, it is essential to dissect the precise implications of asserting that everything is in a state of "flowing and moving." Furthermore, we must elucidate how these entities could be described as being "full of…constant coming into being." To undertake this analysis, it becomes imperative to closely examine a sequence of etymologies presented by Socrates (411b-426c) as substantiating evidence for his assessment.

No.	Name	Etymology	Meaning
1	**Wisdom**	*phronēsis = phoras noēsis* or, = *phoras onēsis*	The **understanding** of **motion** and flow. Or, **taking delight** in **motion**.
2	**Judgment**	*gnōmē = gonēs nōmēsis*	To examine or **study** whatever is **begotten**.
3	**Understanding**	*noēsis = neou hesis*	The **longing** for the **new**. (To signify that they are always coming into being.)
4	**Moderation**	*sōphrosunē = sōteria phronēsis*	The **saviour** of the **wisdom**.
5	**Knowledge**	*epistēmē = hepetai + e*	A soul **follows** the movement of things.
6	**Comprehension**	*sunesis = sullogismos* *sunienai* (literally)	A kind of **summing up**. The soul '**journeys together**' with things.
7	**Sophia**	*sophia = esuthē + epaphē*	The **grasping** of '**rush**'.
8	**The good**	*tagathon = thoon + agaston*	What is **admirable** about the **fast**.
9	**Justice**	*dikaiosunē = dikaiou sunesis*	The **comprehension** of the **just**.
10	**Just**	*dikaion = diaion + k* *= di'ho*	The fastest and smallest thing: governor and **penetrator** of everything else. **Through which** a thing comes to be is the cause.
11	**Injustice**	*adikia = a- + diaion*	A **hindering** of that which

			penetrates.
12	**Courage**	*andreia = anreia + d*	A battle as an opposing flow (**flowing back**).
13	**Male** **Man**	*arren & anēr = anō rhoē*	**Upward flow**
14	**Woman**	*gunē = gonē*	**Womb**
15	**Female**	*thēlus = thēlē = tethēlenai*	**Nipple** A nipple makes things **flourish**.
16	**Craft**	*technē → echonoē = hexis nou*	The **possession** of **nous**.
17	**Device**	*mēchanē = mēkos anein*	To **accomplish** some sort of **greatness**.
18	**Virtue**	*aretē = aei rheon*	Being unrestrained and unhindered and so **always flowing**.
19	**Vice**	*kakia = kakōs ion*	**Moving badly**. (All such things are mostly given to a soul in which this bad movement in relation to things resides.)
20	**Cowardice**	*deilia = desmos + lian*	The strongest (**too much**) of the soul's **shackles**.
21	**Aporia**	*aporia = a- + poreuesthai*	Things which hinder **motion**.
22	**Bad**	*kakon* ?	(A foreign origin?)
23	**Fine**	*kalon = kaloun*	To **name things** is to perform beautiful works.
24	**Disgraceful**	*aischron = aei ischei ton*	What **always restrains the**

		rhoun	**following** of the things that are.
25	**Advantageous**	*sumpheron* → *sumphora/sumpheronta* = *sumperipheresthai*	A soul is in accord with the **movement** of things which are being moved **in harmony with things**.
26	**Profitable**	*lusiteloun = luon + telos*	The good **does away with** any **end** to motion.
27	**Beneficial**	*ōphelimon → ophellein = auxein + poiein*	**To increase** and **to make**.
28	**Gainful**	*kerdaleon = kerdos = kerannutai*	The good penetrates everything and it has the power to **regulate** everything.
29	**Harmful**	*blaberon = blapton + rhoun = boulomenon haptein rhoun*	Which is **harming** the **flow**. **What wants to grasp the flow**.
30	**Hurtful**	*zēmiōdes → dēmiōdes = doun to ion*	**What shackles motion**.
31	**Day**	hēmera → himera/hemera = himeirousin	**Longing for** the daylight that comes out of the darkness.
32	**Yoke**	*zugon → duogon = duoin + agōgēn*	Whatever binds **two** animals together so that they can **pull a plough or cart**.
33	**Pleasure**	*hēdonē = hē onēsis*	Activity that tends towards **enjoyment**.
34	**Pain**	*lupē → dialusis*	The **weakening** of the body suffers when in pain.

35	**Sorrow**	*ania* → *hienai*	What **hinders** motion.
36	**Distress**	*algēdōn* → *algeinos*	(Seems to be a foreign name deriving from **distressing**.)
37	**Grief**	*odunē* → *endusis*	The **entering in** of pain.
38	**Affliction**	*achthēdōn* → *achthos*	Giving motion a **burden** to carry.
39	**Joy**	*chara* = *diachusis* + *rhoē*	An **outpouring** of the soul's **flow**.
40	**Delight**	*terpsis* → *terpnon* = *herpsis* + *pnoē*	Which **glides** through the soul like a **breath**.
41	**Lightheartedness**	*euphrosunē* = *eu sumpheresthai*	The movement of the soul that **well accords** with that of things.
42	**Appetite**	*epithumia* = *epi ton thumon iousa* *thumos* → *thusis*	The power which **goes against the spirited part of the soul**. The **raging** and boiling of the soul.
43	**Desire**	*himeros* = *hiemenos rhei*	What **flows with a rush** and sets on things, and thus violently drags the soul.
44	**Longing**	*pothos* → *pou*	A desire or flow not for what is present but for what is **elsewhere** or absent.
45	**Love**	*erōs* = *esros*	**Influx.** (What flows in from outside through one's eyes.)
46	**Opinion**	*doxa* → *diōxis*	The **pursuit** the soul engages

		or, → *toxon*	in when it hunts for the knowledge of how things are. Or more likely, the shooting of a **bow**.
47	**Thinking**	*oiēsis* → *oisis*	The **motion** of the soul towards every thing, towards how each of the things that are really is.
48	**Planning** **Wishing** **Deliberating**	*boulē* → *bolē* also, *boulesthai* & *bouleuesthai*	Trying to **hit** some target. Aiming at something.
49	**Lack of planning**	*aboulia* → *a-* + *bolē*	A failure to get something.
50	**Compulsory**	*anankē* → *ankē*	Like trying to get through a **ravine** which restrains motion.
51	**Voluntary**	*hekousion* = *eikon tōi inoti*	**Yielding to the motion**—the one coms into being in accord with our wish.
52	**Truth**	*alētheia* = *alē theia*	**A wandering that is divine**—the divine motion.
53	**Falsehood**	*pseudos* = *ps-* + *katheudousi*	Inactive, like people **asleep**.
54	**Being**	*on* & *ousia* → *ion*	**Going**.
55	**Name**	*onoma* → *onomaston* = *on hou masma estin*	A thing named: **a being for which there is a search**.
56	**Not being**	*ouk on* → *ouk ion*	**Not going**.
57	**Going**	*ion*	

58	**Flowing**	*rheon*	
59	**Shackling**	*doun*	
*	**Motion**	*kinēsis* = *kiein* + *hesis*	**Moving** and **going forth**.

This may appear somewhat perplexing at first glance. The names referenced do belong to various forms of motion. This might explain why Socrates characterizes them as being "full of every sort of motion". For instance, 'just' refers to something that penetrates and generates everything (412c-d), and 'vice' signifies what moves badly (415b). However, many of these etymologies describe momentary actions that are neither readily apparent nor continuous flows. This prompts the question: Why are they asserted to unveil the concealed truth that everything is *always* flowing and becoming?

Indeed, those activities, despite their brevity and specificity, refer to the universal and constant flow of things. 'Wisdom', for instance, is posited to denote an understanding of motion and flow, or to take delight in motion (411d). 'Understanding', similarly, is construed as the longing for what is always coming into being (411d). 'Knowledge' signifies the soul's following the movement of things (412a). 'Sophia' entails the grasping of motion (412b). 'Good' also implies that everything is moving, but some are quick while others are slow (412c). 'Courage', again, opposes the flow which is contrary to justice (413e). 'Aporia' hinders motion (415c), while 'Virtue', on the contrary, is unrestrained and constantly flowing (415d). And 'Disgraceful' is similar to 'Aporia' (416a-b). Then, 'Advantage' means the movement of a soul in accord with the movement of things (417a). 'Profitable' signifies the end of motion (417c). All of them show the continuous moving of things.

Through these meticulous etymological analyses, additional insights concerning the nature of these entities' motions and changes emerge. Firstly, it becomes evident that the immortals are in perpetual motion. The gods, encompassing celestial bodies and sky, are described as naturally running and moving (397c-d). This implies that this type of motion is eternal, lacking both a beginning and an end. This bears a resemblance to Alcmaeon's doxography, which was previously examined in the initial chapter (DK24 A12). And what's more important, the immortal serves as the source of motion for mortal beings. The name of 'Hestia' is said to come from the 'pusher' (*ōthoun*), for it is the cause and originator of the always-flowing things (401b-e); 'Pan' is also understood as the one "who expresses all things and keeps them always in circulation" (408c). Similarly, the soul—if it is considered immortal in the text—is also believed to sustain and support everybody and to make the latter live and move about (400a). Therefore, both the gods and the soul are not only in perpetual motion themselves but also move the soulless—an opinion commonly found in pre-Socratic philosophy, as explored in the preceding chapter.

Secondly, regarding mortal things, it is evident that they are always being moved and they themselves are in a constant state of motion and flux throughout their existence. Mortal beings undergo birth and destruction. And shown by the etymology of 'just', the mortal things are generated by what penetrates them. Socrates claims,

> "Those who think that the universe is in motion believe that most of it is of such a kind as to do nothing but give way, but

that something penetrates all of it and generates everything that comes into being." (412d2-5)

Consequently, mortal entities come into existence through a process of penetration. And then, it is clear that good properties or things always help the mortal things keep their motions; while the bad always hinder and restrain those motions. The cessation of motion, in essence, signifies death and destruction for the mortals. In the etymologies, 'Virtue', as previously noted, signifies an unrestrained and unhindered flow (415d). 'Gainful' implies that goodness permeates all things and regulates them (417a-b). The most helpful information emerges from the etymology of 'profitable'. It reveals that the fastest thing "doesn't allow things to remain at rest, or permit their motion to stop, pause, or reach an end. Instead, it always does away with any attempt to let motion end, making it unceasing and immortal." (417c) In contrast, 'Injustice' clearly serves as an impediment to that which permeates (413d). 'Aporia', representing a malign form of movement, suffers restraint and hindrance (415c). 'Disgraceful' is what hinders the flow of entities (416a-b). Again, 'Sorrow' refers to something which hinders motion (419c). This portrayal of the continuous motion and flow of mortal entities aligns unequivocally with what Socrates expresses in the *Theaetetus*. In this later dialogue, he asserts that Heraclitus and other philosophers maintain that everything is the offspring of flow and motion, and motion is beneficial for both the soul and the body, whereas immobility is detrimental, leading to decay and corruption (*Theaet.* 152e-153d).[100]

[100] Concerning the flux doctrine, the *Theaetetus* is obviously and closely related to the *Cratylus*. But in the *Theaetetus* Socrates seriously and systematically rejects Heraclitus' extreme flux theory by arguing that it is impossible for the sensible things to be always moving and changing. This criticism does not appear in the *Cratylus*.

A further inquiry arises: why does Socrates assert that these etymologies rely on the assumption that everything is *always coming into being*? While these analyses do mention the coming-into-being of things several times, it is evidently far away from the notion of 'always'. The explanation may lie in the perspective that every activity and motion is perceived as a form of a coming-into-being of things. For name-givers and the followers of Heraclitus, 'coming-into-being' of a thing does not necessarily entail a substantial change resulting in the loss of its self-identity. Rather, it may simply denote the acquisition of new characteristics or elements. This interpretation gains support from the etymology of 'understanding':

> "And if you want yet another example, understanding (*noēsis*) itself is the longing for the new (*neou hesis*). But to say that the things that are are new is to signify that they are always coming into being (τὸ δὲ νέα εἶναι τὰ ὄντα σημαίνει γιγνόμενα ἀεὶ εἶναι)." (411d8-e1)

The things, obviously, are always coming into being, continuously becoming something novel. And since they are *always* becoming new, it strongly implies that these entities do not forfeit their self-identities during their successive changes and motions. Instead, they continually amass fresh properties or attributes. Moreover, it is reasonable to posit that the motions and activities elucidated through these etymologies engender specific changes and coming-into-beings of things, as illustrated by the etymology of 'aporia':

> "Aporia is a vice of the same sort, and so, it seems, is everything else that hinders movement and motion. This makes it clear that the bad movement in question is a restraining or hindering motion, whose possession by a soul causes it to become filled with vice (κακίᾳ μεστὴ γίγνεται). And, if '*kakia*' is the name of that sort of thing, '*aretē*' is the opposite…it seems that it is given the name '*aretē*' because it is unrestrained and unhindered and so is always flowing." (415c5-d3)

Namely, when a soul possesses a bad movement, it becomes filled with vice and encounters an aporia. Through this process, the soul, adopting a new character, undergoes a 'coming-into-being'. Consequently, if we consider that everything is continuously engaged in diverse forms of motions and activities, as delineated in the etymologies, it is reasonable to concur with Socrates' assertion that everything is full of all kinds of motions and always coming-into-being. This explicit depiction aligns with the Heraclitean worldview attributed to the name-givers, where everything is in a constant state of flux. For mortals, goodness consistently augments the motion of entities, whereas malevolence obstructs and restrains them, ultimately culminating in the termination of motion, equating to destruction. Furthermore, every motion and activity represents a sort of coming-into-being. Through this coming-into-being, a thing does not necessarily undergo a substantial change and becomes a completely different thing. Thus, everything is constantly becoming.

However, it is evident that Plato does not subscribe to this Heraclitean perspective. In the final argument (439b-440d), Socrates elucidates his own stance regarding this matter. He poses the question: If the

name-givers' belief that everything is always moving and flowing is true, then can we say the Form or *F* itself (i.e. the beautiful itself) is always such as it is (τοιοῦτον ἀεί ἐστιν οἷόν ἐστιν, 439d5-6)? Subsequently, Socrates presents four arguments in an endeavour to demonstrate that there is no room for anything to remain "always such as it is" within the Heraclitean framework of the name-givers. According to Socrates' own metaphysical perspective, the always-flowing things have no diachronical self-identity. Let us examine these arguments in a step-by-step manner, commencing with the first argument:

> "But if it is always passing away, can we correctly say of it first that it is this, then that it is such and such? Or, at the very instant we are speaking, isn't it inevitably and immediately becoming a different thing and altering and no longer being as it was? (ἢ ἀνάγκη ἅμα ἡμῶν λεγόντων ἄλλο αὐτὸ εὐθὺς γίγνεσθαι καὶ ὑπεξιέναι καὶ μηκέτι οὕτως ἔχειν;)" (439d8-11)

This argument appears to serve as a preparation, paving the way for subsequent arguments. It can be reconstructed in several sequential steps, beginning with an omitted precondition:

(1) If everything is always moving and flowing, then *F* itself is also always flowing.

Here Socrates employs a *reductio ad absurdum* approach to elucidate the consequence for *F* itself within the framework of Heraclitean flux. The deductions made by Plato are as follows:

(2) If *F* itself is always flowing, it cannot be said of first that it is this, then that it is such and such.

(3) If *F* itself is always flowing, at each instant it immediately

becomes a different thing.

Clearly, (3) is an interpretation of (2), and (2) represents Socrates' rephrasing of the Heraclitean doctrine. It is plausible that (3) may not be the original reasoning of the name-givers but rather an extension made by Socrates. The purpose of Plato's argument here has been the subject of interpretation. Some scholars, influenced by similar arguments in the *Theaetetus*, suggest that Plato aims to underscore the extremity of flux, contending that the flow posited by the name-givers must occur in all aspects to meet the criteria of '*always* flowing'.[101] However, this interpretation lacks robust textual support.

Instead, this argument serves two primary functions. Firstly, Socrates employs it to elucidate the meaning of name-givers' 'always flowing' and offers a more stringent definition, laying the groundwork for subsequent discussions. Secondly, and more significantly, Socrates introduces his own conceptual categories and ontological thinking. In (3), the emphasis is placed on *F*'s becoming different, altering and being another at the moment when it changes. The terms 'being different' and 'being the same' are quintessentially Platonic expressions, reflecting Plato's own approach to addressing the concept of change. While previous passages describe the name-givers and Heraclitus' followers in the context of constant movement and flow, they do not explicitly address whether an entity becomes wholly different during its flux. In contrast, they tend to view ceaseless motion as a pivotal means of maintaining an entity's good condition and preventing its corruption or destruction. Socrates, on the other hand, seeks to argue that such forms of change and motion inevitably result in the loss of an entity's self-identity, transforming it into

[101] Ademollo, 2011: 468-473.

a substantially different entity. Consequently, the primary objective of the first argument is to contend that within the framework of the flux doctrine, *F* itself must undergo uninterrupted change and perpetually become a substantially different entity, thus "no longer being as it was" (439d11). This notion is conspicuously influenced by the Parmenidean principle of What-is. As discussed in the previous chapter, according to this doctrine, What-is always is and cannot be What-is-not. Any form of motion or change experienced by a being entails its transformation into a substantially different entity, adhering to the Parmenidean principle. Consequently, Plato's approach involves reconstructing Heraclitean flux through the lens of the Parmenidean principle.

Then, the second argument proceeds as follows:

> "Then how can it be something, if it never stays the same? After all, if it ever (*pote*) stays the same, it clearly isn't changing during that time, and if it always stays the same and is always the same thing, how can it change or move, given that it never departs from its own form?" (439e1-5)

The primary objective of this argument is to establish the following proposition:

(4) If *F* itself never stays the same, it cannot be something.

The initial portion of this statement has already been expounded upon in the previous argument, where it was demonstrated that everything, including *F* itself, undergoes perpetual change and becomes a different thing. Consequently, the focus of this argument shifts to the latter part of (4) that "it cannot be something". Then the argument, serving as a process

of demonstration, follows two stages:

(5) If *F* itself ever stays the same, it is not changing during that time.

(6) If *F* itself always stays the same, it never changes.

Clearly, (6) is based on (5). The underlying approach appears to be that if something does not change when it stays the same, then it never changes if it always remains the same. Nevertheless, this process itself may be subject to doubt, as (6) does not directly address what (4) seeks to establish. While (4) seeks to demonstrate whether *F* itself can *be something*, (6) solely examines whether it undergoes *changes*. Additionally, (4) seems to foreshadow that the ensuing steps will be based on negating the concept of 'never stays the same'—namely, not always moves, whereas (6) merely addresses 'never moves'. Consequently, there appears to be a gap between (4) and (6), prompting some scholars to speculate that Plato allows for the possibility of entities that move only *sometimes*.

However, there is no need to assume such an implication, as the argument at this point remains incomplete. Socrates omits the subsequent and most critical step:

(7) If *F* itself is something, it must always stay the same.

Indeed, (7) has already been implied since the beginning of the final argument. For the original question is whether "the beautiful itself is always such as it is" (439d5-6). This aligns with the Parmenidean principle that What-is always is and can never be What-is-not. And from (6) and (7) we can readily deduce (7*), which serves as the equivalent proposition to (7):

(7*) If *F* itself is something, it cannot change even once.

Then, if it never undergoes change, it certainly cannot "always change and never stay the same", which precisely aligns with the requirement of (4). Therefore, there is no gap in this argument. On the contrary, Socrates actually makes a highly strict demand that *F* itself cannot be something even if it only changes or moves once. For Socrates, there is no distinction between the things that *always* change or merely *sometimes* move, changes *in all aspects* or just *in some aspects*. Just as Melissus' fragment goes, even if "the whole had become different by a single hair in the course of thousands of years, it would have been destroyed in the whole of this time." (DK30 B7)

Up to this point, the intention behind these two arguments becomes evident. The first argument underscores that the Heraclitean flux, as articulated by the name-givers, necessitates an extreme and unceasing state of motion for everything. In contrast, according to Socrates' metaphysical perspective, significantly influenced by the Eleatics, these things should always move substantially and generatively by becoming completely different. The second argument highlights that *F* itself must always be the same as it is, so it is incompatible with any change and the always-flowing flux posited by the name-givers. And it is not difficult to recognize that all three gap readings are untenable. Here Socrates never intends to imply a moderate flux that changes *in some aspects* or *sometimes*. And he also does not confuse so-called moderate 'flow' with substantial and extreme 'flux' Instead, Socrates seeks to demonstrate that the Heraclitean flux inevitably results in a continuous and substantial process of coming-into-being.

The view, as well as the approach of demonstration, is reiterated in the

following epistemological arguments (439e-440b). First,

(8) If *F* itself never stays the same, it cannot be known.

The reason for (8) is elucidated by (3). Namely,

(9) If *F* itself is always flowing, at the instant the knower-to-be approaches, it immediately becomes a different thing or of a different character.

Similar to (7), it is imperative that knowledge, or that which can be known, remains immutable and free from any change,

(10) If *F* itself is knowledge, it cannot be what isn't.

Consequently, the logical conclusion from (9) and (10) is that knowledge is incompatible with any form of change.

Moreover, Socrates makes a further deduction that,

(11) If all things are passing on, there is no knowledge.

On the contrary, *F* itself, in its role as knowledge, does not undergo any transformation from knowledge itself, as demonstrated in (10). However, if *F* itself, or knowledge, were subject to the same constant flux as other things,

(12) If the knowledge passes on from being knowledge, at the instant it changes, it immediately becomes something other than knowledge.

In a manner similar to the structure of (5) and (6), Socrates proceeds to deduce,

(13) If the knowledge always passes on from being knowledge, there is always no knowledge.

It is essential to clarify that (12) and (13) represent logical deductions founded on the Heraclitean doctrine that everything is *always* flowing. However, (13) does not insinuate that something that changes is

sometimes to be known. As elucidated in (10), that which can be known must always be what it is and never change. Eventually, since Socrates and Cratylus both agree that there is *F* itself (439c) which is undoubtedly the knowledge according to the context,

(14) *F* itself or knowledge is not flowing or motion.

Thus, Socrates conclusively establishes that *F* itself or knowledge is incompatible with the Heraclitean flux doctrine embraced by the name-givers.

Hence, as exemplified by the final argument reconstructed above, Socrates neither refutes (nor simply endorses) the Heraclitean flux itself as a phenomenological portrayal of the empirical world nor does he negate the original and rudimentary experiences of the name-givers. Instead, he posits two fundamental arguments: Firstly, grounded in his metaphysical reflection, he asserts that if the sensible entities are subject to flux, then all their motions and changes inherently entail substantial generative processes. Secondly, he contends that *F* itself or Form cannot participate in such a form of flux. Within this very dialogue, Socrates does not explicitly divulge his stance regarding the empirical world, particularly whether sensible particulars perpetually undergo generative changes. This concept is revisited and somewhat reinforced by the speech of Diotima in the *Symposium*.

1.2 The *Symposium*

In the *Symposium*, the speech of Diotima presents a continuum of the metaphysical concept of change expounded in the *Cratylus*. The mortals are always changing. And every tiny change and action of the mortals, as elucidated in her discourse on love, should be construed as a form of

generation (*genesis*). In order to clarify what is love, she first claims that Eros is a daimon and an intermediate between the mortal and the immortal, given that he is the offspring of Poros and Penia (*Smp.* 201d-204c). Then, for us, love is the wish for happiness and always owning the good (204c-206a). To be more precise, it aims to possess the good forever by begetting in Beauty, either in the body or in the soul. She further claims that reproduction serves as mortals' means to seek immortality since it goes on forever (206b-207a). And it is the generative nature of the mortals that determines their approach to pursuing immortality (207a-208b). People would like to be pregnant in both body and soul for the sake of immortality (208b-209e). Then, Diotima unveils "the final and highest mystery"—namely, the famous ladder of love which is the ascent of the soul to Beauty itself (210a-212a). Concerning the generative nature of mortals, she says,

> "For among animals the principle is the same as with us, and mortal nature seeks so far as possible to live forever and be immortal. And this is possible in one way only: by reproduction, because it always leaves behind a new young one in place of the old (τῇ γενέσει, ὅτι ἀεὶ καταλείπει ἕτερον νέον ἀντὶ τοῦ παλαιοῦ).[102] Even while each living thing is said to be alive and to be the same (καλεῖται καὶ εἶναι τὸ αὐτό)—as a person is said to be the same from childhood till he turns into an old man—even then he never consists of the same things, though he is called the same, but he is always being renewed and in

[102] Similarly, in *Laws* IV, 721c: "And what makes the human race immortal is the way it leaves behind children, and their children, as successors, while itself always remaining one and the same. It is through the birth of children that mankind tastes immortality."

other respects passing away, in his hair and flesh and bones and blood and his entire body. And it's not just in his body, but in his soul, too, for none of his manners, customs, opinions, desires, pleasures, pains or fears ever remains the same, but some are coming to be in him while others are passing away. And what is still far stranger than that is that not only does one branch of knowledge come to be in us while another passes away and that we are never the same even in respect of our knowledge, but that each single piece of knowledge has the same fate. For we call studying exists because knowledge is leaving us, because forgetting is the departure of knowledge, while studying puts back a fresh memory in place of what went away, thereby preserving a piece of knowledge, so that it seems to be the same. And in that way everything mortal is preserved, not, like the divine, by always being the same in every way, but because what is departing and aging leaves behind something new, something such as it had been (οὐ τῷ παντάπασιν τὸ αὐτὸ ἀεὶ εἶναι ὥσπερ τὸ θεῖον, ἀλλὰ τῷ τὸ ἀπιὸν καὶ παλαιούμενον ἕτερον νέον ἐγκαταλείπειν οἷον αὐτὸ ἦν)." (*Smp*. 207c9-208b2)

In this passage, the body, soul and knowledge of the mortals are all argued to be in continuously changing and constant generations. On one hand, it is evident that mortal beings exhibit a form of Heraclitean flux, as they are described.[103] On the other hand, even the tiniest change in the body, such as the metabolic process, culminates in a complete and substantial generation of the body. As articulated in Diotima's speech, during those changes, the body cannot remain its self-identity and is

[103] Cf. Guthrie, 1962: 210; Kahn, 1979: 167.

merely “said to be the same”. Consequently, the passing away and subsequent renewal in any regard explicitly signify the destruction of the original body and the birth of the successor. The soul and knowledge appear to share a parallel fate, continually generating and never remaining the same. Diotima suggests that the soul undergoes substantial renewal, becoming a different entity by altering its behaviours, customs, opinions, emotions, and more. Similarly, our knowledge is also refreshed all the time through the process of forgetting and studying.

Scholars have previously noted that the portrayal presented by Diotima in this context foreshadows the philosophical perspective of David Hume, presenting a bundle theory of identity.[104] Namely, mortals never possess diachronic self-identity; instead, they are dynamic collections of a series of successive, similar but different pieces. Indeed, this idea finds its roots in a historical tradition that encompasses certain pre-Socratic philosophers, particularly the Eleatics. As discussed earlier in the previous chapter, Melissus puts forth a similar argument regarding What-is, asserting that it “could not either be destroyed…nor suffer either pain or distress. For if it underwent any of these affections, it would no longer be one.” And he further emphasized that even the change of a single hair equates to destruction for What-is (DK30 B7). According to the Parmenidean principle of What-is, all forms of change and motion, including feelings, are perceived as threats to the identity of What-is. From this perspective, any alteration or motion experienced by a being necessitates substantial generation, transforming it into an entirely distinct different thing. Namely, the previous one is destroyed and

[104] Price, 1989: 23; Corrigan, K. & Glazov-Corrigan, E., 2004: 143.

replaced by a new one that comes to be. The resemblance between Diotima's argument and Melissus' fragment is readily apparent, as Diotima's speech also adheres to this pattern of generation, underscoring the Parmenidean principle of What-is as the foundational ontology of her theory of change. This inclination aligns precisely with what Socrates introduces in the concluding argument of the *Cratylus*, wherein he reconstructs the Heraclitean flux theory and asserts that if things are indeed in perpetual flux as postulated by the name-givers, these changes are inevitably substantial generations.

Furthermore, this inclination is discernible in Diotima's exposition of Form a few pages later. She elucidates that:

> "[The Form (such as Beauty)] always is and neither comes to be nor passes away (ἀεὶ ὂν καὶ οὔτε γιγνόμενον οὔτε ἀπολλύμενον), neither waxes nor wanes...it is not beautiful this way and ugly that way nor beautiful at one time and ugly at another, nor beautiful in relation to one thing and ugly in relation to another; nor is it beautiful here but ugly there, as it would be if it were beautiful for some people and ugly for others…it is always one in form; and all the other beautiful things share in that, in such a way that when those others come to be or pass away (γιγνομένων τε τῶν ἄλλων καὶ ἀπολλυμένων), this does not become the least bit smaller or greater nor suffer any change." (210e6-211b5)

As what has been briefly argued, in the *Cratylus*, the Form always is and never has any sort of change. The Form *F*-ness always is. The sensible

things, conversely, are unstable. They themselves can become *F* or not-*F*, and they can also become *F* or not-*F* in relation to something else or for some people. And then, all those changes, no matter being self-changes or relative changes, are thought to be 'coming-to-be' and 'passing away'. So obviously, those changes are all generative, which confirms again that Diotima's speech is built on the same ontological foundation as what is found in the *Cratylus*.

However, our understanding faces a challenge when considering the discussion on the immortality of the soul. From our vantage point, the soul presented in Diotima's speech appears to be mortal and perishable. It is depicted as continuously changing, characterized by the acquisition and loss of various customs, manners, feelings, and more. This perspective aligns with the interpretations of scholars such as Hackforth, who contend that the mortal soul can only aspire to vicarious immortality, a view incongruent with the belief in an immortal soul found in dialogues like the *Phaedo* and other dialogues. He thinks it is because Plato had a sort of 'temporary scepticism' about the doctrine of the immortal soul at the time when he wrote the *Symposium*.[105] Nightingale further extends this argument, suggesting that according to Diotima's conception of the soul it ages and perishes alongside the body.[106] While we may not wholly subscribe to these interpretations, we acknowledge their foundational premise that the soul in Diotima's speech is both generative and mortal.

Conversely, some scholars assert that Diotima does not necessitate the mortality and generativity of the soul, thus averting a conflict with

[105] Hackforth, 1950.
[106] Nightingale, 2017.

dialogues like the *Phaedo* and other dialogues. These scholars propose that the soul is also implied to be immortal by nature in this dialogue. Luce, for instance, posits that the term *psyche* discussed here refers to life rather than soul.[107] More recently, Reed advanced the idea that the philosophers attain true immortality rather than the vicarious one. According to him, Diotima never denies that the personal identity is able to persist over time. Conversely, the same person maintains its continuity because only parts of him are constantly replaced and renewed.[108] And some adopt a more moderate standpoint, suggesting that the soul is not inherently immortal but becomes immortal. For instance, O'Brien believes that the imperishability of the soul, in Diotima's speech, is the "never-ending blessedness to be achieved through a life of philosophy".[109] Sheffield advocates human immortality in the sense of partaking in the divine and becoming godlike.[110] Hooper asserts what the *Symposium* is really concerned with is "the eternal preservation in the world of those parts of oneself that one values."[111] At any rate, if these scholars' opinion that the soul in Diotima's speech is immortal is accurate, then our previous judgment that the soul is mortal and generative because of the acceptance of the Parmenidean principle of What-is would stand on the verge of collapse.

It is essential to recognize that the motivation behind proving the immortality of the soul in Diotima's speech stems from concerns about its compatibility with other dialogues. However, in the pursuit of a coherent

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[107] Luce, 1952. Also, cf. Morrison, 1964:44.
[108] Reed, 2019.
[109] O'Brien, 1984: 201.
[110] Sheffield, 2006: 147.
[111] Hooper, 2013: 547.

understanding of Plato's various dialogues, we should not disregard the primary imperative of comprehending the precise ideas conveyed in each individual dialogue. We are hence going to present the following arguments: (1) The passage from Diotima's speech cited above does not solely indicate the mortality of the soul but specifically aims to establish the generative nature of the human soul. Subsequently, (2) the notion of the mortal soul aligns more closely with a literal and natural reading of the text.

Returning to the text, the passage from Diotima's speech cited above (207c9-208b2) addresses the question of what causes love and desire to reproduce human beings and animals without understanding and reason (207a-c). But this response is unconventional. For in this passage, rather than discussing the reproduction of being pregnant in body and soul, which would be a more intuitive response—as she does elsewhere (206c; 208d-209a, etc.), she focuses on the essence or pattern of reproduction, namely on renewal and refreshment. This pattern, however, does not pertain to the essence of love—namely, the want to possess good forever by giving birth in beauty (206a-b; 209b-c, etc.). Moreover, within this text, body, soul and knowledge themselves, as mortals, somehow share in immortality by reproducing a similar successor in place of themselves and thereby preserving themselves, whereas the offspring through the pregnancy in body and soul which she mentions later, such as children and glorious fame, are obviously not same with their parents (208c-209e).[112] Consequently, this response seems somewhat abrupt in the context and perplexes the young Socrates (208b7-9). This is because Diotima's precise focus in this passage is not *how* the mortals love and

[112] Cf. Obdrzalek, 2010: 421; Price, 2017: 181, n.12.

pursue immortality, but rather *what* causes and motivates them to do so. And the answer is quite straightforward: the nature of the mortals. The pursuit of immortality is deeply ingrained in their nature. Diotima's response commences with the assertion that "for among animals the principle is the same as with us, and *mortal nature* seeks so far as possible to live forever and be immortal" (207c9-d2). Subsequently, the constant generation (*genesis*) of mortal bodies, souls and knowledge is provided to illustrate the mortal nature of reproduction (*genesis*). According to her argument, through continuous renewal and refreshment as generation and reproduction, body, soul, and knowledge appear to be preserved, as the newly generated successor remains similar to the preceding one that has passed away. Thus, as the divine is immortal due to "always being the same in every way" (208b8), mortals can partake in immortality by seemingly remaining the same through their internal succession. In essence, it is inherent in the nature of mortals to reproduce and generate, and through this process, they appear to be preserved as they remain similar to their replaced predecessors. As such, they draw closer to true immortality, which is characterized by unwavering sameness. Therefore, mortals are naturally inclined to pursue and participate in immortality through the very nature of reproduction and generation.

Therefore, the mortals are demonstrated to possess the nature to seek immortality. In light of this, the soul, as well as the body and knowledge, must also be mortal and generative. Otherwise, the soul would lack the inherent disposition to pursue immortality. If the soul were immortal, there would be no need for Diotima to argue that the soul of mortals seeks immortality through reproduction and generation. Thus, Diotima clearly

endeavours to establish that the soul is both generative and mortal in this text, a foundation for her entire speech. The attempts to advocate for the concept of an immortal soul in this context are untenable. As mentioned earlier, Luce contends that Diotima discusses life rather than the soul, and that this life is mortal and perishable, aligning with the concept of an immortal soul in the *Phaedo* and other dialogues.[113] However, there is no indication of a distinction between life and soul within the *Symposium*. Diotima does not intend to posit an immortal soul behind mortal life. Furthermore, if the soul were immortal, as we have argued, there would be no need for it to seek immortality. O'Brien, besides, asserts that Diotima avoids making the soul generative in the text. For she only argues for the mortality and generation of the body but keeps silent on the mortality of the soul.[114] Reed goes further, claiming that what Diotima conveys is that "the things 'in the soul' (207e1) come into existence and pass away," referring to the contents of the soul rather than the soul itself, and thus asserting that the soul is not argued to be mortal in this passage.[115] Nevertheless, these readings lack substantial support from the text. Sheffield has already contested these viewpoints, emphasizing the inconsistency of arguing for the mortal nature of the body while excluding the soul, especially when Diotima explicitly states that the generative nature exists "not just in his body, but in his soul, too" (207e1-2).[116] Reed's argument also fails to provide ontological evidence to substantiate the distinction between "the contents of a soul" and "the soul itself" within the context. Once again, the speech aims to assert that the soul is mortal and perishable. Diotima explicitly states that the

[113] Luce, 1952.
[114] O'Brien, 1984: 195.
[115] Reed, 2019: 815-816.
[116] Sheffield, 2006: 147-148, n.47.

immortal is “always being the same in every way” (208b1). Given the soul's continual changes due to the coming-to-be and passing-away of manners, customs, opinions, and more, it can never remain the same and is unequivocally mortal. And because of this mortal nature of the soul, the soul cannot attain real immortality even at the end of the ladder of love and ascent to Beauty. Human beings can, at most, be close to immortality by begetting in beauty and giving birth to the true virtue (212a-b). In this scenario, it is the achievement of human beings, rather than their intrinsic nature, that leads to immortality. This does not negate the mortal nature of the soul. Thus, it is reasonable to conclude that the mortal soul undergoes generation and destruction, akin to soulless bodies, due to the acquisition of new manners, customs, opinions, and other attributes.

Therefore, the *Symposium*, as well as the *Cratylus*, reinforces our previous analysis in the first chapter, demonstrating that Plato’s exploration of the theory of change and motion is profoundly influenced by pre-Socratic views regarding the empirical world. On one hand, Plato acknowledges that every sensible entity is in a perpetual state of flux, a stance aligned with the arguments of Heraclitus and his followers. On the other hand, inspired by the Eleatic philosophers, Socrates interprets these changes as generative processes. Furthermore, his acceptance of the Parmenidean principle of What-is prompts him to critique the Heraclitean flux theory by asserting that the Forms or true Beings remain unaltered, impervious to the process of becoming.

However, from this standpoint, even the soul is considered mortal, as it is undeniably characterized by motion and activity. Nonetheless, this need not engender concerns about a conflict between the *Symposium* and other

dialogues regarding the immortality of the soul. It is important to recognize that the *Cratylus* and the *Symposium* do not represent Plato's final stance on the theory of change. Diotima is even described as arguing "in the manner of a perfect sophist" (*Smp*. 208c1). Plato's first model of change, based on the preparation of the *Cratylus* and the *Symposium*, will come very soon.

2. The Form and the Mechanism of Generative Changes: The *Phaedo* and the *Republic*

A pivotal detail from the Symposium foreshadows the fundamental insight of Plato's first model of change. Diotima claims that the Form *F*-ness always is, while the sensible things, by sharing (or losing) the Form, come to be *F* or not-*F* (*Smp.* 211b). Although the participation of Forms is a familiar notion within the realm of Platonic philosophy, its significance should not be underestimated. This concept introduces a mechanism and interpretation of change that Plato comprehensively develops in his works, particularly the *Phaedo* and the *Republic*. Plato acknowledges the early Ionian philosophers' proposition regarding the change between opposites as an accurate phenomenological depiction of sensible entities. Furthermore, he emphasizes that these changes are inherently generative in nature. Consequently, Plato introduces the concept of Form as the causal and explanatory foundation for this mechanism of generative changes. Participation in the Form of *F*-ness, Plato asserts, leads to a process of generation whereby a sensible entity becomes *F*. In doing so, Plato provides both an ontological and normative interpretation of the phenomena of change. However, it is essential to note that this rigorous philosophical analysis of change simultaneously suggests the potential existence of non-generative motion, thus modifying

the prevailing doctrine posited in the *Cratylus* and *Symposium*, which asserts that all changes and motions are inherently generative.

2.1 The *Phaedo*

In the *Phaedo*, Plato presents for the first time an original and normative theory of change, delineating his approach into two distinct stages. Initially, he expounds upon a general pattern of change occurring between opposites, subsequently introducing Form as the philosophical cornerstone supporting this pattern. These two stages warrant closer examination.

Within the Cyclical Argument, posed by Cebes in an endeavour to establish that "the soul still exists after a man has died" and "still possesses some capability and intelligence" (*Phd.* 70b), Socrates attempts to justify the "ancient theory" (παλαιὸς λόγος) in a more philosophical way that the souls arrive the underworld from here and then again arrives here from the dead (70c). In order to accomplish this objective, he embarks on a passage concerning the nature of becoming:

> "Do not, he said, confine yourself to humanity if you want to understand this more readily, but take all animals and all plants into account, and, in short, for all things which come to be, let us see whether they come to be is the opposite of the ugly and the just of the unjust, and a thousand other must necessarily come to be from their opposite and from nowhere else, as for example when something comes to be larger it must necessarily become larger from having been smaller before." (70d7-e8)

Namely, the characteristics of all things appear in pairs as opposites, such as large and small, just and unjust, etc. And the large(r) thing comes from the small(er) thing, and the hot(ter) thing comes from the cold(er) thing. Therefore, as a general rule, everything which comes to be must necessarily come from their opposite. We are not unfamiliar with this idea. As we have argued in the first chapter, it finds its early conceptualization in the works of Anaximander and Anaximenes, later being generalized by Heraclitus, and subsequently influencing a multitude of pre-Socratic philosophers, even including Eleatics such as Melissus. Socrates further claims,

> "There is a further point, something such as this, about these opposites: between each of those pairs of opposites there are two processes of becoming (μεταξὺ ἀμφοτέρων πάντων τῶν ἐναντίων δυοῖν ὄντοιν δύο γενέσεις): from the one to the other and then again from the other to the first; between the larger and the smaller there is increase and decrease, and we call the one increasing and the other decreasing." (71a12-b4)

Hence, the process of alteration between opposing attributes is herein defined as 'becoming/generation' (γένεσις). Consequently, for an entity to be alive, it must come from a state of being dead, and *vice versa*.[117] As Sedley aptly notes, this theory of change is presented as "a maximally general theory of change".[118] It encapsulates three fundamental propositions. The first proposition, commonly referred to as (1) "the Principle of Opposites": opposites only come from opposites (70e1-2;

[117] It proves that the soul must exist somewhere before it comes back to this world again (71b-72a). We will delve deeper into the subject of the soul at a later point.
[118] Sedley, 2012: 149.

70e5-6; 71a9-10). Greco reasonably interprets this formulation as follows: "For any *x*, and for any pair of opposite properties *F* and *G*, if *x* comes to be *F*, then it comes to be so only form being *G* and *vice versa*."[119] And further, (2) the Principle of Universality: the Principle of Opposites encompasses all entities that come to be (70d8-e1; 71a9-10; 71b8-10). Hence, all sensible things change between opposites. Finally, (3) the Definition of Becoming: The change between opposites of all things is defined as the generative becoming (71a12-b10). In order to gain a precise understanding of Socrates' comprehension of change and his theory thereof, it is essential to explore these three propositions individually.

First, what precisely does Socrates mean by using the term 'opposite'? This question could be traced back to Syrianus, the fifth-century Neoplatonist philosopher.[120] In this text, the usage of 'opposite' appears quite ambiguous. This ambiguity results from its apparent reference to various types of relationships, encompassing (i) relative sensible properties (such as large/small, weak/strong, swift/slow), (ii) evaluative contradictories (such as just/unjust), and (iii) that appear less relative or comparative (such as sleeping/being awake, being alive/being dead).[121] There are two main readings of the term 'opposites'. The majority contends that, notwithstanding the ambiguity, 'opposites' fundamentally

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[119] Greco, 1996: 228.

[120] Damascius, GC I.191., in Westernik, 2009: 194-197. Cf. Gertz, 2015.

[121] Hence, the 'opposites' seems to be merely a miscellaneous collection without a clear account. This vagueness, according to certain scholars, renders the argumentation somewhat crude and undermines the cogency of the Cyclical argument regarding the soul. If the pair of opposites, in this case, the living and the dead, are merely 'contraries,' then it remains plausible that the living can originate from a state other than the dead. Cf. Hackforth, 1955:64; Dorter, 1982: 37-38; Burger, 1984: 235, n.20; Rowe, 1993: 156. Also, cf. Bostock, 1986: 49-51.

alludes to ‘contradictories.’ Namely, if the opposite properties *F* and *G* are contradictory, *G* is equivalent to not-*F* while *F* to not-*G*.[122] The colder comes from not-colder—that is, hotter, while the alive comes from the not-alive or the dead. Sedley, however, claims that this solution fails to be satisfying. One of the strongest reasons he provides to criticize the contradictory reading is that it neglects Socrates’ repeated use of comparatives and then excludes the latter from the analysis of change. Indeed, the comparative predicates—such as ‘larger’ and ‘smaller’—are not contradictories, for Socrates also admits ‘equal’ as an intermediate between them.[123] Then, Sedley proposes an alternative interpretation known as ‘converse contraries.’ Namely, the contraries *F* and *G*, as the ‘opposites’, are ‘converse contraries’ when “*x* is *F* compared with *y* if and only if *y* is *G* compared with *x*.”[124] The hot is the opposite of the cold is because *x* is hotter than *y* only when *y* is colder than *x*.

Plato’s perspective on ‘opposites’ here appears multifaceted. Sedley rightly observes that while the contradictory interpretation disregards Socrates’ repeated use of comparatives, but his ‘converse contraries’ also do not entirely encompass the various forms of becoming between opposites that Socrates may have had in mind. Indeed, Socrates never asserts that opposites are necessarily comparative. Though he provides comparatives like ‘larger’ and ‘smaller’ as examples, he does not mention phrases like ‘more sleeping’ or ‘less alive.’ The dead, for instance, is intrinsically not alive and need not compare itself to the living, and *vice versa*. Besides, take a later case that Socrates discusses as an example

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[122] Barnes, 1978: 402; Dorter, 1982: 37-38; Bostock, 1986: 43-51 Rowe, 1993: 156. Cf. Sedley, 2012: 153.
[123] Sedley, 2012: 153.
[124] Sedley, 2012: 155. Also, cf. Justin, 2020.

(96e-97b)—one becomes two and two becomes one—clearly 'one' and 'two' are not Sedley's comparative 'converse contraries'. Socrates' usage of 'opposites' is so broad that it could include both 'contraries' and 'contradictories', for he wishes to provide a most inclusive description of the becoming of all things (70d8-e1)—the changes between large and small, just and unjust, as well as living and dead.

Evidently, Plato is not content with merely elucidating these phenomena. Subsequently, Socrates clarifies the underlying mechanism. In a change involving opposing attributes, sensible entities possessing those opposing attributes are named after the opposites themselves, namely, the Forms (103b-c). Moreover, Form serves as the cause behind the change between opposites. Through participation in the corresponding Form of *F*-ness, a thing comes to be *F* from its opposite not-*F*. We will revisit this point later.

Second, according to the Principle of Universality, Socrates asserts that the Principle of Opposites applies to all entities undergoing change, which is doubted by some scholars. They deny that change between opposites is a universal pattern or law for all things which come to be. Sedley, for instance again, claims that the theory of change here explicitly "restricts itself to changes to and from properties that have opposites."[125] For he believes the restriction is obvious shown at 70e2 ("all things come to be…from their opposites if they have such") and 70e5 ("whether those that have an opposite must necessarily come to be from their opposites").[126] Rowe also provides a similar reading in his

[125] Sedley, 2012: 149.
[126] Sedley, 2012: 140, n.3.

commentary.[127] Namely, they propose that among all entities undergoing change, only those possessing opposing attributes adhere to the Principle of Opposites by transitioning between those opposites. According to this view, the text implies the potential for entities to come into existence without undergoing change between opposites. However, this interpretation is untenable. No textual evidence suggests the possibility of entities coming into existence without undergoing change between opposites. Additionally, as previously argued, Socrates aims to establish a general rule encompassing "all things which come to be (ὅσαπερ ἔχει γένεσιν περὶ πάντων, 70d9)". Otherwise, a logical possibility would arise that the living and the dead are not opposites. Then even though the living inevitably comes to die, the dead may not become living. And the later argument based on the balance of the two processes of becoming between opposites (72a-d) also cannot work, for the living and the dead might not even be opposites. The living and the soul may come from something else or completely from nothing.[128] If this is so, the whole Cyclical argument is merely founded on the unreflective intuition that the living is the opposite of the dead (72c). On the contrary, the argument is much more reasonable from our perspective. The text at 70e2 and 70e5 should be read as all things which come to be must have an opposite and come from their opposites. The things which have no opposite cannot come to be at all. Then, the Principle of Opposites precisely covers all things which come to be. Therefore, given that the living invariably succumbs to death (71e4-6), it is explicitly established that the living and the dead are opposites and must come to be between one another. The Cyclical argument thus remains sound. Furthermore, Socrates' later argument on

[127] Rowe, 1993: 157.
[128] As it is suggested by Rowe, 1993: 156.

Form as what is responsible for (*aitia*) the generation and destruction also corroborates this interpretation. This argument undeniably relies on the premise that all entities change between opposites. Socrates does not engage with a kind of becoming which is not a change between opposites. Consequently, what Socrates posits here is more likely a universal principle of transformation.

And finally, the term 'becoming' signifies the generative essence of the change. The majority of scholars interpret this term as a change of variable attributes within a persisting and underlying subject.[129] Accordingly, the process of becoming (*genesis*) between opposites can encompass both non-generative alteration and substantial generation. It implies a distinction between various levels of '*genesis*' (as well as the corresponding verb '*gignesthai*'). On the one hand, it may simply denote 'becoming *F*' by being used with a compliment, or absolutely 'coming to be born/exist' on the other hand.[130] Nevertheless, this semantic dichotomy reveals an ontological difference between the two forms of change. In the former, the subject acquires a new attribute while retaining its self-identity and remaining the same entity. Conversely, in the latter absolute sense, it signifies the generation of a new entity, with the preceding subject ceasing to exist and giving way to its successor. The majority obviously believe that during a 'becoming' between opposites,

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[129] Cf. Barnes, 1978: 403-404; Dorter, 1982: 35-36; Burger, 1984: 57-58; Justin, 2020: 444-445.

[130] Gallop, 1975: 104. Besides, Gallop believes that it is the same to say 'the living is coming to be *alive*' and 'the living is coming to *be/exist*'. Some scholars, such as Barnes, emphasize the distinction between these two propositions, suggesting that the soul always exists, but only comes to be alive by incarnation. But as what we will soon discuss, the soul cannot 'come to be' in the strict sense. Cf. Barnes, 1978: 410-413; Gallop, 1982:215.

an entity can maintain its diachronic identity and remain the same subject. Barnes provides extensive textual evidence to support this assertion. According to his interpretation, Plato posits a general proposition regarding change: "[i]f anything that exists at a time *t* acquires a property at *t*, then it existed during a period immediately prior to *t*", which he calls 'Principle of Existence'. At 70c8-d2, Socrates recalls an "ancient theory" that "surely our souls must exist there [i.e. the Hades], for they could not come back if they did not exist." From Barnes' perspective, the argument could be reconstructed as: since the soul comes into existence as living at *t*, it must exist before *t*, otherwise, it cannot come to be alive at *t*. This argument is believed to be built on the so-called 'Principle of Existence'.

However, this interpretation is not entirely convincing. The "ancient theory" does not presuppose the diachronic identity of the soul during its becoming. It does not even suggest that the soul genuinely undergoes a 'becoming.' Rather, it merely describes the soul's journey between the underworld and the world. And further, in the *Phaedo*, Socrates does not advocate an underlying and persisting subject. He never hints that a subject can maintain its identity during its becoming. The ontological distinction between non-generative alteration and substantial generation is also never addressed in the text. Barnes' proposal, which considers the soul as an underlying and persisting subject during its transformation between living and dead, is also unconvincing. His 'Principle of Existence' can, at most, demonstrate that something *x*' exists before *x* becomes *F*, but it does not guarantee the preservation of the identity of *x* and *x*' throughout the process of 'becoming.' Moreover, Gallop rightly points out that 'becoming *F*' and 'come to be' cannot be definitively

distinguished in semantic terms because "'*x* comes to be *F*' may also be expressed as '*F* comes to be (in *x*)'".[131]

The ontological essence of becoming is further elaborated and clarified in the subsequent Affinity Argument and Final Argument. The Affinity Argument unveils a comprehensive view of various types of beings—the well-known Two-world Theory. It posits,

> "Is not anything that is composite and a compound by nature liable to be split up into its component parts, and only that which is noncomposite, if anything, is not likely to be split up? … Are not the things that always remain the same and in the same state most likely not to be composite, whereas those that vary from one time to another and are never the same are composite? (οὐκοῦν ἅπερ ἀεὶ κατὰ ταὐτὰ καὶ ὡσαύτως ἔχει, ταῦτα μάλιστα εἰκὸς εἶναι τὰ ἀσύνθετα, τὰ δὲ ἄλλοτ᾽ ἄλλως καὶ μηδέποτε κατὰ ταὐτά, ταῦτα δὲ σύνθετα;) … Let us then return to those same things with which we were dealing earlier, to that reality of whose existence we are giving an account in our questions and answers; are they ever the same and in the same state, or do they vary from one time to another (πότερον ὡσαύτως ἀεὶ ἔχει κατὰ ταὐτὰ ἢ ἄλλοτ᾽ ἄλλως;); can the Equal itself, the Beautiful itself, each thing in itself, the real, ever be affected by any change (μεταβολή) whatever? Or does each of them that really is, being uniform by itself, remain the same and never in any way tolerate any change (ἀλλοιόω) whatever? … What of the many beautiful particulars, be they men, horses,

[131] Gallop, 1975: 104.

> clothes, or other such things, or the many equal particulars, and all those which bear the same name as those others? Do they remain the same or, in total contrast to those other realities, one might say, never in any way remain the same as themselves or in relation to each other?" (78c1-e4)

The comparison is highly salient, highlighting a fundamental distinction between the Form and the sensible realm. The Form, characterized as non-composite, exhibits a perpetual constancy, maintaining an unalterable state and resisting any form of change. In stark contrast, the sensible is a compound which is liable to be split up, vary from time to time, and never remains the same as itself as well as in relation to the others. For instance, sensible particulars such as men, horses, clothes, etc., always change between beautiful and not-beautiful. Therefore, sensible particulars are constantly undergoing two kinds of changes: decompositions and alterations.

Hence, within this passage, Plato unequivocally acknowledges the Early Ionic insight that sensible things change between opposites, as well as the Heraclitean picture of the empirical world that all sensible things are in flux. Furthermore, he confirms the universality of this pattern of change, asserting its applicability to all entities that come to be. Most significantly, this passage strongly implies the generative essence intrinsic to the process of becoming. It is worth noting that in previous dialogues, the terms 'the same' and 'not the same' serve as iconic markers, delineating whether a subject undergoes a process of generation. As we have seen in the *Cratylus*, the Form is depicted as always staying the same and being the same thing. In contrast, the generative nature of sensible entities is

underscored, as they perpetually become some different things, no longer being as they were (*Crat.* 439d ff.). Similarly, in the *Symposium*, mortals are portrayed as incapable of maintaining constancy. They are just "said to be the same" but indeed constantly pass away and are replaced by their new young successors (*Smp*. 207c9-208b2). And here in the *Phaedo*, Socrates once again emphasizes that sensible entities never retain sameness, as they continually oscillate between opposing attributes. Thus, if our analysis holds true, when a sensible subject vacillates between *F* and not-*F*, it relinquishes its identity, succumbing to an alteration that is inherently generative.

Then, Plato's innovative elucidation of the generative essence and the phenomenological mechanism of change unfolds further in the Final Argument. To establish that the soul is not only long-lasting but also indestructible, Socrates begins to elaborate his "thorough investigation of the cause of generation and destruction" (95e10). To be more specific, Specifically, he undertakes the inquiry into the causes (*aitiai*) of everything, "why it comes to be, why it perishes and why it exists (διὰ τί γίγνεται ἕκαστον καὶ διὰ τί ἀπόλλυται καὶ διὰ τί ἔστι)." (96a8-9)[132] Notably, this investigation aligns with the pursuits of pre-Socratic natural philosophers, yet Socrates finds their answers lacking in conviction. In what he terms the 'second voyage,' Socrates presents two interpretations, advocating the 'safest answer' and the 'more sophisticated answer.'[133] In

[132] A very prevailing opinion is that the '*aitia*' should not be translated as 'cause' but 'explanation', which is first advocated by Vlastos. M. Frede further claims that the *aitia* is confined to propositional. Cf. Vlastos, 1969; Frede, 1987. Also cf. Ledbetter, 1999. But most translators of the *Phaedo* still read *aitia* as cause. And explicitly, in the text Plato does consider Form as the cause of change, especially when he says "all beautiful things are beautiful by the Beautiful" (100d).

[133] Concerning the aim, the 'second voyage' is not distinct from the natural

both interpretations, the central role of the Form is unequivocal. In the 'safest answer,' Socrates posits,

> "[I]f there is anything beautiful besides the Beautiful itself, it is beautiful for no other reason than that it shares in that Beautiful, and I say so with everything. … I simply, naively and perhaps foolishly cling to this, that nothing else makes it beautiful other than the presence of, or the sharing in, or however you may describe its relationship to that Beautiful we mentioned, for I will not insist on the precise nature of the relationship, but that all beautiful things become beautiful by the Beautiful. … This is the safe answer for me or anyone else to give, namely, that it is through Beauty that beautiful things are made beautiful." (100c4-e3)

An individual entity in itself does not possess the property *F*. As demonstrated earlier, Socrates strongly underscores that a sensible entity is in a perpetual state of flux, consistently oscillating between opposing attributes and never maintaining a static condition. Consequently, it cannot always be *F*, indicating that the property *F* does not inherently exist in this thing. Therefore, an external cause is required to effect the change of the entity from not-*F* to *F*. Socrates considers Form *F* as the safest and most self-evident candidate for this causative role. Consequently, in accordance with this safest answer, Form *F* serves as the causal agent that enables an individual entity to become (and remain) *F* through its participation in the corresponding Form. Given that the 'safest answer' is Socrates' response to the question of what precipitates the

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philosophers, but their approaches are different. Cf. Ferber, 2020: 375-376.

processes of generation and destruction, it becomes apparent that, in Plato's view, the changes brought about by participation in or losing a Form are essentially generation or destruction.

This mechanism is further elucidated through a vivid illustration. Consider Simmias, who is taller than Socrates but shorter than Phaedo. This circumstance does not imply that Simmias possesses an innate disposition of tallness or shortness, much less the simultaneous possession of both attributes. When Simmias appears to be tall, his tallness overcomes the shortness and *vice versa* (102b-d). To be more specific, Socrates continues to say,

> "Now it seems to me that not only Tallness itself is never willing to be tall and short at the same time, but also that the tallness in us will never admit the short or be overcome, but one of two things happens: either it flees and retreats whenever its opposite, the short, approaches, or it is destroyed by its approach. It is not willing to endure and admit shortness and be other than it was, whereas I admit and endure shortness and still remain the same person and am this short man. But Tallness, being tall, cannot venture to be small. In the same way, the short in us is unwilling to become or to be tall ever, nor does any other of the opposites become or be its opposite while still being what it was; either it goes away or is destroyed when that happens." (102d6-103a2)

Imagine, when Simmias stands alongside Socrates, appearing taller in comparison, but then becomes shorter when compared to Phaedo. In this

process, a series of events unfolds: First, the Form Tallness approaches and brings the tallness-in-Simmias, which makes Simmias become tall(er). Then, when Simmias stands beside Phaedo, the Form Shortness approaches and the Tallness retreats. The shortness-in-Simmias also replaces the previous tallness-in-Simmias.[134] This is how Simmias becomes tall or short. And undoubtedly, the Forms Tallness and Shortness are the real causes of Simmias' changes in height. Hence, the Form *F*-ness, by approaching the sensible thing *x*, results in the emergence of *F*-in-*x* and makes *x* become *F*. On the contrary, the left of Form *F*-ness leads to the destruction of *F*-in-*x* and forces *x* to lose its previous property *F*. In other words, *x*'s becoming *F* is essentially *F*-in-*x* comes to be in *x* because of *x*'s participating *F*-ness.

Consequently, it is through participation in or detachment from the Forms that individuals like Simmias undergo generative alterations. Socrates contends that when Simmias becomes taller in comparison to Socrates, "it is not willing to endure and admit shortness and be other than it was, whereas I admit and endure shortness, and am still being such man (καὶ ἔτι ὢν ὅσπερ εἰμί), and am this short man." This comparison strongly implies that by retaining the Form of Shortness, Socrates sustains his identity, while Simmias undergoes a transformation, ceasing to be the same individual as he was becoming tall(er) by admitting the Shortness. The tall-Simmias is not the short-Simmias. Thus, through the destruction of tallness-in-Simmias and becoming of shortness-in-Simmias, Simmias

[134] It is important to note that although Socrates suggests that tallness-in-Simmias either flees or be destroyed, he does not endorse the idea that the tallness-in-Simmias can remain and retreat during the change. As he clarifies in subsequent pages, if those things were really indestructible, the odd, the three, the hot, the fire and all other sensible things would be indestructible, which is ridiculous (106b-c).

undergoes a generation due to its participating and losing the corresponding Forms.

This philosophical interpretation explicitly aligns with the pattern of change between opposites outlined in the Cyclical Argument. The sensible *x* does change between *F* and not-*F*. However, the crux of this change lies in the emergence of *F*-in-*x*, which replaces the contrary attribute within *x* through participation in the Form of *F*-ness. Throughout this process, the *x* undergoes a generation, evolving into a distinct entity by acquiring *F*-in-*x*, an attribute its previous state lacked. It recalls the speech of Diotima in the *Symposium*, in which she claims the mortals are only said to be the same and actually they are constantly replaced by the new young ones. The growth and metabolism of hair, flesh or other tissues always make a new and different body come to be (*Smp*. 207c-208b). It is now evident that the primary causal agents behind these generative processes are the Forms themselves. The Forms facilitate the generation, destruction, and replacement of *F*-in-*x*s. By acquiring a new *F*-in-*x*, the sensible subject becomes a new and different thing, leading to the replacement and generation of the mortals.

Clearly, this theory of change is deeply affected by the Parmenidean principle of What-is. The Form is the typical Eleatic What-is, for it always is and never suffers any change or motion. As Socrates claims, the opposites themselves—namely, the Forms—never tolerate the coming to be from one another (*Phd.* 103c1-2). Nevertheless, Plato acknowledges the change of sensible things, a departure from the Eleatic standpoint that unequivocally rejects any possibility of motion. Moreover, this replacement pattern of change, as argued previously, essentially aligns

with the essential result of the Parmenidean principle. According to this principle, What-is cannot be What-is-not, otherwise it has to generate. And then the things change between *F* and not-*F* must belong to generation. As Socrates argues, when the hot approaches the snow, the latter cannot remain as it was, otherwise it would be both snow and hot. It has to be destroyed (103d). Besides, Socrates also admits that in the case of the odd becoming even, the odd does not directly become even. Rather, in this change the odd is destroyed and the even comes to be instead (106b-c). If so, such kind of alteration or change between opposites is naturally a replacement that the previous thing is passing away and replaced by the new successor.

Plato's significant contribution lies in synthesizing insights from pre-Socratic philosophy and reconstituting the mechanism of change through the causal theory of Forms. Even in the 'more sophisticated answer', the role of Form and such understanding of change remain unchallenged. This alternative explanation does not supplant the 'safest answer'; rather, it extends its purview. In this expanded perspective, not only is the Form considered as the cause of change, but also that which essentially brings along the Form into the changing thing. As what Socrates illustrates,

> "I say that beyond that safe answer, which I spoke of first, I see another safe answer. If you should ask me what, coming into a body, makes it hot, my reply would not be that safe and ignorant one, that it is heat, but our present argument provides a more sophisticated answer, namely, fire, and if you ask me what, on coming into a body, makes it sick, I will not say sickness but

> fever. Nor, if asked the presence of what in a number makes it odd, I will not say oddness but oneness, and so with other things." (*Phd*. 105b6-c6)

Fire, the stuff which necessarily contains the Form Hotness, serves as a more sophisticated cause, rendering the body hot. Similarly, the fever, which must possess the Sickness, is the more sophisticated cause to make the body become sick. Thus, in the previous safe answer, it is Form *F* that results in the emergence of *F*-in-*x* and makes the particular thing *x* become *F*. Now, we encounter a further perspective wherein the approach of another particular thing *Y*, fundamentally associated with the Form *F*, results in the *F*-in-*x* and makes *x* become *F* as a more sophisticated cause.[135] As previously stated, in formulating this 'more sophisticated answer,' the Form still plays a pivotal role in the process of change. This assertion finds additional validation in Aristotle's commentary, wherein he notes that Platonists regard the Form as the causal agent responsible for becoming and existence.[136]

In this manner, Plato furnishes a comprehensive theory of generative change within the *Phaedo*. All sensible particulars are always changing between opposites, and these alterations inherently entail generative essence for they deprive the subjects of diachronic self-identity. Then, it is the Form that causes the sensible things to change between opposites.

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[135] Vlastos et al. argues that what brings the Form to the body itself is a Form, namely, the Form of fire, heat, etc. But in this passage Plato clearly discusses fire and heat as sensible things and stuff. Gallop. There is hardly any hint suggests that Socrates is dealing with the relationship between Forms. Further, in the *Phaedo*, Plato never mentions the Form of any individual things, rather he mainly talks about the Form of properties and moral values.

[136] Cf. *Metaph*. 987b9-14.

By their participating in or losing a certain Form *F*-ness, the *F*-in-*x* is generated or passes away in the sensible thing *x*, consequently making the latter become *F* or not-*F*.

2.2 The *Republic*

In the *Republic*, Plato continues to elucidate the theory of change represented in the *Phaedo*. This theory of change encompasses three fundamental tenets, as previously expounded: (1) The distinction between Forms and sensible particulars: The Forms always remain the same, while the sensible particulars are always changing and never in the same state. (2) Participation in Form *F*-ness is considered as the cause for a sensible thing to become *F*. (3) The sensible things, then, are ceaselessly changing between opposites, namely *F* and not-*F*. And this sort of change is generative for the sensible things. All those points, more or less, can be recognized from the text of the *Republic*. When Socrates first introduces *eidos* in the sense of Form in order to expound on what the philosopher is concerned about, he argues,

> "Since the beautiful is the opposite of the ugly, they are two…And the same account is true of the just and the unjust, the good and the bad, and all the Forms. Each of them is itself one, but because they manifest themselves everywhere in association with actions, bodies, and one another, each of them appears to be many." (*Rep*. V 476a1-8)

Therefore, that a sensible thing appears to be *F* is because the Form *F*-ness manifests itself in association with that thing. Namely, the beautiful things are beautiful because they participate in the Form Beauty

(476c-d). The just and the unjust, the good and the bad, and all other cases are the same as well.

This notion of participation between the Form *F*-ness and the attribute *F* of a sensible entity aligns with our earlier observations in the *Phaedo*, in which this relationship is obviously based on the essential distinction between Forms and sensible particulars. In the *Republic*, Plato further clarifies this two-world theory. Socrates continues to argue that the Form, as What-is, is the object of knowledge (477a-b), while the sensible particular is the object of belief as something intermediate between What-is and what-in-every-way-is-not (478d). Hence, sensible things always both participate What-is and What-is-not (478e). This means they both possess the property *F* and its opposite property not-*F*. Socrates exemplifies this with beauty, asserting that a beautiful thing, by necessity, be beautiful in one way and also be ugly in another way, and the same with all other things (479a-b). This illustrates the manner in which a sensible thing possesses opposite properties and intermediates between What-is and What-is-not.

However, this does not imply that the sensible things exist between What-is and What-is-not in a comparatively unfluctuating way. Rather, Socrates immediately elucidates that they are in a perpetual state, "*rolling around* as intermediates between What-is-not and what-purely-is" (479d). Therefore, sensible things lack stability, consistently vacillating between What-is and What-is-not, or between *F* and not-*F*. The beautiful particular, for example again, does not maintain beautiful, but alternates between beautiful and ugly. This is confirmed by Socrates' subsequent assertions several pages later, such as:

> "Since those who are able to grasp *what is always the same in all respects* are philosophers, while those who are not able to do so and who wander among *the many things that vary in every sort of way* are not philosophers…" (484b4-7)

> "Let's agree that philosophic natures always love the sort of learning that makes clear to them some feature of *the being that always is* and does not *wander around between coming-to-be and decaying*." (485a10-b2)

In contrast to the immutable Forms, which remain perpetually unchanged, Plato posits that the sensible particulars are unstable and changeable. Although Plato does not explicitly underscore the perpetual flux of sensible entities in this text, he subtly alludes to a narrative that closely resembles the mechanism of change expounded in the *Phaedo*.[137] The sensible things are changing between opposites—that is, between *F* and not-*F*. And the reason for them to change in this way is due to their participation in Form *F*-ness and not-*F*-ness. Consequently, it becomes pertinent to inquire whether Plato also advocates, within the *Republic*, that such change possesses a generative essence. The answer to this inquiry is unequivocally affirmative.

Given that the sensible particular is changing between What-is and What-is-not, delving into the meaning of the term '*esti*' is instrumental in

[137] It is essential to note that this narrative, at least, does not in any way suggest that Plato abandons the notion of continuous change in sensible particulars within the *Republic*. In Book IX, Socrates also calls the sensible thing "what is never the same and mortal" (585c).

shedding light on the essence of the discussed change. '*Esti*' exhibits a dual sense, operating both predicatively and existentially in Ancient Greek. In its predicative usage, What-is serves as a concise representation of What-is-*F*, such as What-is-just, What-is-beautiful, etc. Therefore, when Plato asserts that sensible things intermediate between What-is and What-is-not, he essentially signifies this thing's being *F* and not-*F*, since it possesses the property *F* sometimes or in some way.[138] This interpretation is substantiated by textual evidence. Prior to introducing What-is and What-is-not at 476e, Socrates engages in a discussion regarding Forms such as beauty, ugliness, justice, injustice, goodness, and badness. (475e-476a). Concurrently, he underscores the distinction between a Form itself and the multiple entities that participate in the Form (476a-d). Socrates then suggests that those who confuse the participant with the Form only have an opinion but not true knowledge. He is going to persuade them and let them recognize their fault (476c-e). This context illuminates why Socrates transitions to discuss What-is and What-is-not aiming to establish a clear distinction between the Forms and their participants. Consequently, the Form represents the authentic What-is-*F*, while the participants merely exist between What-is-*F* and What-is-not-*F* and cannot stably possess the property *F*. And besides, there is a piece of more direct and explicit evidence. After arguing that the sensible things intermediate between What-is and What-is-not, Socrates argues that since the participants always appear both *F* and not-*F* (i.e. the beautiful particular thing is also ugly in a way), they are no more *F* than not-*F*. And hence, they are not What-is or What-is-not, but something wandering between those two extremes (478e-479e). This argument undoubtedly shows that What-is and What-is-not are used as

[138] Cf. Fine, 1978: 132-138; Annas, 1981: 195-199; Reeve, 1988: 58-71.

predicate terms.[139] If this is so, the sort of change Plato has in mind when saying the sensible things roll around What-is and What-is-not (479d) is the alteration between opposites *F* and not-*F*.

Conversely, some scholars contend that '*esti*' also carries an existential connotation in this context. In addition to its predicative usage, What-is can also refer to what-exists, while What-is-not to what-does-not-exist. According to this interpretation, What-is-*F* means an *F* thing exists, and an *F* thing emphasizes that the *F* thing exists *such and such*.[140] The existential '*esti*' usage can be recognized in the text. When Socrates introduces the distinction between What-is and What-is-not, he claims the object of belief is intermediate between "what purely is" as the object of knowledge and "what in no way is" as the object of ignorance (477a-b). It is quite natural to read 'What-is' here as what-exists. And this formulation itself strongly implies the ontological hierarchy of existence (which is precisely what will be argued later, especially in the discussion of the Divided Line). And moreover, several lines later Socrates continues to argue that it is impossible to opine What-is-not, as we cannot opine

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[139] Fine, 1978: 133.

[140] Cf. Stokes, 1992: 129-130; Gonzalez, 1996: 258-262; Dorter, 2006: 155-156. Some supporters of the predicative interpretation of '*esti*', such as Fine and Annas, strongly reject the existential reading. According to them, if the '*esti*' can be understood in the existential sense, we must accept the 'degrees of existence' because the sensible things are said to exist between What-is and What-is-not. Thus, the sensible things have to exist in the half degree. This idea of half-existence is thought by them to be ridiculous. And further, a thing's possessing the property *F* seems to be irrelevant to its existence. As it is illustrated by Fine, the fact that this paper is not green does not mean that it does not exist. Gonzalez has already pointed out that their objects are fundamentally based on the assumption of the sharp distinction between predictive and existential senses of '*esti*'. This argument, then, has been proved by Kahn to be an anachronism. Plato himself does share this distinction. Cf. Kahn, 1966; Fine, 1978: 132-138; Anna, 1981: 196-197; Gonzalez, 1996: 258-262.

nothing. He especially emphasizes that What-is-not is not 'one thing' but 'nothing' (478b). Obviously, the '*esti*' here primarily focuses on existence. Because we can of course have the opinion that this cup of tea is not hot or that page of paper is not green, but we cannot opine what does not exist at all. Consequently, the existential interpretation of '*esti*' stands as a viable perspective. As a result, a substantial distinction is drawn between What-is and What-is-not, even when they pertain to What-is-*F* and What-is-not-*F*. As we have said above, What-is-*F* does not merely indicate a thing's possessing the property *F*, but that an *F* thing exists. Thus, when Plato suggests that sensible entities oscillate between the opposites What-is and What-is-not (479d-e), he implies that these entities undergo generative changes. Sensible particulars, through participation in or detachment from the Forms, change between opposites, and these changes are considered generative in nature.

This view is further corroborated by subsequent texts. Notably, approximately two pages later, Socrates reiterates his claim, stating that philosophers "always love the sort of learning that makes clear to them some feature of the being that always is and does not wander around between coming to be and decaying." (485b) It is clear, this view is paraphrasing what he has argued previously that the sensible things, as the participants of the eternal and changeless Forms, are not stable and change between What-is-*F* and What-is-not-*F*. Hence, Plato interprets the alteration of sensible things between opposites as generation and destruction. Additional corroborative instances are pervasive throughout the *Republic*. Such as, "When it [i.e. the soul] focuses on something illuminated by truth and *what is*, it understands…but when it focuses on what is mixed with obscurity, on *what comes to be and passes away*, it

opines…" (508d); "This instrument cannot be turned around from that which is *coming into being* without turning the whole soul until it is able to study that *which is* and the brightest thing that is, namely, the one we call the good" (518d); "if geometry compels the soul to study *being*, it's appropriate, but if it compels it to study *becoming*, it's inappropriate" (526e); "their accounts are for the sake of knowing *what always is*, not *what comes into being and pass away*" (527b); "that which is related to *what is always the same*, immortal, and true…that which is related to *what is never the same* and mortal…" (585c). These passages distinctly highlight the dichotomy between what always is (i.e. the Form) and what is subject to generation and destruction (i.e. the sensible particulars), reinforcing our assertion that the alteration of sensible things between opposites is inherently generative.

Therefore, within the frameworks of change depicted in the *Phaedo* and the *Republic*, Plato acknowledges, at least in part, the portrayal of the empirical realm by early Ionic philosophers and Heraclitus, wherein all sensible particulars are always changing between opposites. Influenced by Eleatic philosophy, he further clarifies that these changes are all generative, depriving the identity of each sensible thing. A novel contribution of Plato is the Form theory and its role in the mechanism of change. The Form always remains the same and it results in the generative change of the sensible. By participating in a Form *F*-ness, the sensible thing *x* generatively becomes *F*, for during this process an *F*-in-*x* comes to be inside *x*.

3. Non-generative Motion and the Motion of Soul: From the *Republic* to the *Phaedrus*

At the same time, the theory of Form also introduces the possibility of non-generative motions. As we have argued, Plato's understanding of change is strongly influenced by the Eleatic metaphysics. Parmenides and other Eleatic philosophers insist on the principle of What-is. It posits that any form of change or motion, including alteration, spatial motion, and activity, undermines the absolute self-identity of the What-is and thereby necessitates a generative transition for What-is to become What-is-not. This perspective is echoed in the *Cratylus* and the *Symposium*. In the *Cratylus*, Socrates suggests that if everything is always moving and flowing as Heraclitus suggests, they will always pass away, become different things and no longer be as they were (*Crat*. 439b. ff.). The *Symposium* more explicitly categorizes both bodily metabolic changes and the soul's activities—encompassing shifts in manners, customs, opinions, and emotions—as generative (*Smp.* 207c-208b). But in the *Phaedo* and *Republic*, the concept of Forms is introduced to elucidate the rationale and mechanisms behind generative changes, suggesting that sensible entities undergo generative changes through their participation in or detachment from Forms. Consequently, it suggests that in the empirical world, there exist some sorts of motions and changes which are not relevant to the Forms and are categorized as non-generative motions. The most notable examples of such motions are spatial motion and the soul's motion, which are not influenced by Forms or oscillations between *F* and not-*F*, and thus are classified as non-generative. We are going to examine them in turn.

In the *Republic*, Plato distinctly portrays the non-generative nature of spatial motions. In Book VII, Socrates elaborates on five subjects of the Guardians' education which "draw the soul from the realm of *becoming* to the realm of *What-is*" (*Rep.* 521d; also cf. 525c; 526e; 527b, etc.). Although Socrates emphasizes that these subjects cannot really grasp What-is but only "dream about What-is" (533b), their unequivocal objective is to investigate the things that never undergo generation and destruction. These subjects are calculation, geometry, solid geometry, astronomy and harmonics. We will focus on astronomy and harmonics, for Socrates claims that they are closely akin to each other since they are both subjects concerning motions (530d). This suggests that astronomical motions and harmonic motions are accepted as motions but not generative processes. Socrates claims,

> "We should consider the decorations in the sky to be the most beautiful and most exact of visible things, seeing that they're embroidered on a visible surface. But we should consider their motions to fall far short of the true ones—motions that are really fast or slow as measured in true numbers, that trace out true geometrical figures, that are all in relation to one another, and that are the true motions of the things carried along in them. And these, of course, must be grasped by reason and thought, not by sight." (529c6-d5)

Accordingly, in Plato's view, genuine astronomy studies the "true motions" of astronomical objects which can only be grasped by reason rather than sensory perception. Despite ongoing debates regarding whether Plato's astronomical focus is on speculative bodies and their

motions (contrary to the celestial objects in the heaven) or the genuine motions of celestial bodies (contrary to the apparent and observed motions of the heavenly bodies), and whether Plato really dismiss the empirical astronomy,[141] the so-called 'true motions' are undoubtedly circular motions (528c). These motions are posited to consistently preserve the immutable nature of the true astronomical objects, without deviation (530b). Consequently, these circular movements are inherently non-generative, existing in perfect spatial harmony without necessitating the involvement of the Form, nor compelling the subjects to become something other than themselves, thereby not meeting Plato's criteria for generative change.

Similarly, the study of harmonics, which forms the last subject of the curriculum for the Guardians, ought to be similar. Socrates says, "as the eyes fasten on astronomical motions, so the ears fasten on harmonic ones, and that the sciences of astronomy and harmonics are closely akin." (530d) He claims that this is advocated by the Pythagoreans. Indeed, Greek acoustic theories universally regard sound as a form of motion through air.[142] While Socrates advocates that his genuine harmonics should investigate "which numbers are consonant and which aren't or what the explanation is of each" (531c), he does not deny that this discipline is a subject concerning motion (530c-d). Therefore, the harmonic motions are also conceded as the motions which are not generative and do not threaten their subjects, unrelated to the participation in or detachment from Forms.

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[141] Cf. Bulmer-Thomas, 1982; Gregory, 1996.
[142] Barker, 1989:9.

The concept of the soul's motion presents another primary example of non-generative movement. In the *Phaedo*, the Affinity Argument provides a series of motions and activities of the soul. It can 'investigate' 'stray' 'confuse' 'be fuzzy' (*Phd.* 79c), and it also 'orders the one [body] to be subject and to be ruled' (80a). After death, the soul goes to the Hades and escapes from associating with the body (80d). Of course, the soul will also reincarnate in animals or human beings (81d-82b). Besides, the soul does have passions and emotions like love, pleasure, pain, desire, etc. (83b-c). Gallop claims that the soul is not unvarying for it is the subject of incarnation and 'life-principle'. Bostock further asserts that the soul is subject to change 'when it perceives the physical world but it finds peace and rest when it isolates itself from the body and contemplates the unchanging forms'.[143]At least, some of those activities can also be found in the *Symposium* in which Diotima claims that the soul is renewed because of the passing away and coming to be of its manners, customs, opinions, desires, pleasures, pains as well as memory and knowledge (*Smp.* 207c-208b). However, there is a critical difference between these two discussions of motion and activity of the soul. In the *Symposium*, as we have argued, the elaboration of the activities of the soul is supposed to prove the mortality of the soul and to exhibit that the soul is full of generative changes and motions which make the soul never remain the same as it was. On the contrary, the arguments in the *Phaedo* clearly aim to demonstrate the immortality of the soul, thus the motions and activities of the soul in this dialogue are by no means generative.

The non-generative feature of the soul's motion is explicitly and repeatedly suggested in the *Phaedo*. For instance, in the Affinity

[143] Gallop, 1975: 170-1. Bostock, 1986: 119.

Argument, the soul is claimed to be more akin to the Forms which are "ever the same and in the same state" (*Phd.* 78d2-3) as well as "divine, deathless, intelligible, uniform, indissoluble, always the same as itself" (80b1-3), while the body is more like the sensible particulars which are "never in any way remain the same as themselves or in relation to each other" (78e3-4) and "human, mortal, multiform, unintelligible, soluble and never consistently the same" (81b3-5). To be short, the sensible particulars are always changing in a generative way while the Forms never undergo any of these generative changes. Then, since the soul is more akin to the Forms, its activities and motions are not thought to be generative and they will not force it to become something other than it was—just as what precisely is argued in the *Symposium*. And moreover, we have already clarified that the Form is believed to be the reason for the sensible to become something other than it was. So clearly, if the soul never shares any generative change, it cannot participate in or lose any Form. The motions of the soul which Socrates elaborates on, such as activities and emotions, are hardly reduced to the change between *F* and not-*F* by participating in or losing the Form *F*-ness, so they are explicitly not generative.

Plato's discussion on the motion of the soul can be further explored in the *Phaedrus*. In Socrates' second speech of the *Phaedrus* (also known as 'the Palinode'), he argues that every soul is immortal, because whatever is always in motion is immortal, and the soul is undoubtedly always self-moving as well as the origin of the motion of all soulless things (*Phdr.* 245c-246a). The basic points of this argument should not be novel for Plato's contemporaries. As we have argued in the previous chapter, the idea of the ever-moving soul probably belongs to Alcmaeon. Moreover,

Anaxagoras, needless to say, inspires Plato that the soul causes the motion of all other soulless things. And indeed, the immortality of the soul is also quite a common view among the pre-Socratic philosophers. Therefore, the uniqueness of the *Phaedrus* lies not in the introduction of new ideas but in how Plato establishes the whole argument. The way he integrates those pre-Socratic views into this argument reveals his own essential thoughts about soul and motion as the foundation of the whole argument. Especially, how is the theory of motion of the soul built on Plato's Form theory as well as his general theory of change and motion? The argument unfolds as follows:

(1) (Conclusion:) "Every soul is immortal." (245c5)
(2) "That is because what is always in motion is immortal (τὸ γὰρ ἀεικίνητον[144] ἀθάνατον);" (245c5)
(3) "but what moves something else and is moved by something else stops living when it stops moving." (245c5-7)
(4) "So it is only what moves itself (τὸ αὐτὸ κινοῦν), since it does not abandon itself (οὐκ ἀπολεῖπον ἑαυτό), never desists from motion," (245c7-8)
(5) "and this (self-mover) is also the source and origin of motion (πηγὴ καὶ ἀρχὴ κινήσεως) for everything else that moves." (245c8-9)
(6) "And an origin does not come-to-be (ἀγένητον)." (245d1)

[144] Here I follow most scholars preferring ἀεικίνητον to the alternative reading αὐτοκίνητον which is found in Oxyrrhynchus papyrus 1017. Cf. Skemp, 1942: 3, n.2; de Vries, 1969: 121-122; Hackforth, 1972: 65; Mohr, 1985:162; Bett, 1986: 4, n.6; Blyth, 1997: 195, n.22; Robinson, 2018: 111-112.

(7) “For everything that comes-to-be (τὸ γιγνόμενον) must come-to-be from an origin,” (245d1-2)

(8) “but the origin does not come-to-be from anything; for if the origin came-to-be from anything else, it would no longer be the origin.” (245d2-3)

(9) “And since it does not come-to-be, then necessarily it cannot be destroyed (ἀδιάφθορον).” (245d3-4)

(10) “That is because if an origin were destroyed, it could never come-to-be from anything else and nothing else could come-to-be from it—that is, if everything comes-to-be from an origin.” (245d4-6)

(11) “This is then how the self-mover is the origin of motion.” (245d6-7)

(12) “And that is unable to be destroyed or come-to-be (οὔτ᾽ ἀπόλλυσθαι οὔτε γίγνεσθαι), otherwise all things that have been generated (πᾶσάν τε γένεσιν[145]) would fall in ruin, come to a stop, and never have cause to start moving again.” (245d7-e2)

(13) “And since we have found that a self-mover is immortal, we should have no qualms about declaring that this is the very essence and account of soul (ψυχῆς οὐσίαν τε καὶ λόγον). For everybody that is moved from outside is soulless, while a body has its motion within itself does have a soul, that is the nature of a soul.” (245e2-6)

(14) “And if this is so—that whatever moves itself is nothing else than the soul—then it follows necessarily that soul

[145] Burnet follows Philoponus to replace γένεσιν by γῆν εἰς ἓν. But γένεσιν is widely agreed to be more reasonable than γῆν εἰς ἓν. Cf. de Vries, 1969: 124; Hackforth, 1972: 66-67; Bett, 1986: 8, n.14; Ryan, 2012: 182.

should have no generation nor destruction (ἀγένητόν τε καὶ ἀθάνατον).” (245e6-246a2)

The basic shape of this argument is a standard syllogism beyond controversy for almost all scholars:

(i) A self-mover is immortal ((2)-(12));

(ii) and the soul is the self-mover (13);

(iii) therefore every soul is immortal ((1);(14)).

Indeed, (ii) and (iii) are quite straightforward and hardly disputed. The debate among scholars primarily concerns how Socrates constructs argument (i), with most scholars agreeing it consists of two parallel sub-arguments: One is more directly established on the premise that what is always in motion is immortal (2), and since the self-mover is always moving ((3)-(4)), the self-mover is hence proved to be immortal. The other one is relatively more complex. It starts from the character of the self-mover that it must be the origin of motion for everything else that moves (5). Then, as such an origin, the self-mover is argued to be non-generated and imperishable ((6)-(10)). Therefore, it is immortal (11). According to this structure, these two sub-arguments do not buttress each other. As Robinson says, “Plato chooses to stress their cumulative rather than their individual plausibility.”[146] The only slight disagreement among those scholars is whether the “τὸ γὰρ ἀεικίνητον ἀθάνατον” (what is always in motion is immortal) in step (2) is an axiomatic premise without any demonstration or a proposition which will be proved later in the first sub-argument.[147]

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[146] Robinson, 2018: 113.

[147] The former such as Hackforth, 1972: 65-67; Mohr, 1985: 161-162; Bett, 1986: 3-6. And the latter such as Robinson, 2018: 112-113. Besides, some scholars advocate that there is only one comprehensive argument in (i) to demonstrate that the self-mover is

However, this reading has to face several serious difficulties. According to this reading, the later sub-argument ((5)-(12)) does not rely on the former one ((2)-(4)), which makes (2)-(4) seemingly redundant and meaningless. In (5)-(12), Socrates sufficiently proves the immortality of the self-mover by arguing that the self-mover is the origin of everything else and the origin does not have generation or destruction, which does not completely rely on the critical essence of self-mover shown in step (2)-(4)—namely, the self-mover is always in motion. If so, step (2)-(4) is fully unnecessary. Indeed, even if the self-mover is not always moving, such as moving intermittently, it still meets the requirement of the sub-argument (5)-(12), since it is only required not to be started up by something else in step (8). Hackforth considers the eternal moving of step (2) as an *endoxa*,[148] which seems to suggest that after this *endoxa* Socrates still needs to provide an original argument not being established on that premise. Unfortunately, we cannot find any hint in the text to verify this possibility. On the contrary, step (2) "τὸ γὰρ ἀεικίνητον ἀθάνατον" closely follows the conclusion (1) "every soul is immortal" and emphasizes their relationship by the explanatory conjunction "γὰρ", which strongly implies that step (2) ought to play a critical role in the whole demonstration. Even if step (2) is really an *endoxon*, we are

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immortal. Such as Ackrill, 1953: 278; Blyth 1997: 194-198. However, Ackrill's idea relies on his acceptance of the αὐτοκίνητον reading of 245c5 rather than the ἀεικίνητον reading which is more convincing. Blyth claims, the step (2)-(4) proves the weak hypothesis that the self-mover is always in motion as long as it exists, while the step (5)-(12) proves the stronger one that the self-mover is immortal for it exists forever. But as we will argue, it is difficult to explain why Socrates still needs the step (2)-(4) since the step (5)-(12) itself seems to be sufficient for proving the immortality of self-mover. We also advocate that there is only one argument here, but for different reasons.

[148] Hackforth, 1972:65.

obliged to explain why Socrates introduces it as the reason for the immortality of the soul in this argument. And moreover, as Blyth points out, if step (2)-(4) contain a brief but complete sub-argument, it has to commit a naïve logical error that "what moves itself … never desists from motion (and is hence immortal)" is wrongly inferred from "it does not abandon itself".[149] Indeed, the self-mover, at most, is proved to be in motion as long as it exists, which is a far cry from the required eternal motion and existence.

We, instead, advocate that there is only one complex argument within this text. Step (1) "every soul is immortal" does serve as the conclusion of the whole argument. But "τὸ…ἀεικίνητον ἀθάνατον" of step (2) is not an axiomatic premise but rather an essential proposition requiring proof. What does "τὸ ἀεικίνητον" mean? It should not be simplistically interpreted as something moving constantly and ceaselessly. In fact, in most middle Platonic dialogues, it is the mortal sensible things rather than the immortal (such as the soul) that are emphasized to be always in flux and constant motion. In the *Phaedo*, for instance, Forms are "ever the same and in the same state" (*Phd.* 78d2-3), but the sensible particulars are always changing generatively for they "never in any way remain the same as themselves or in relation to each other" (78e3-4). Socrates employs "τὸ ἀεικίνητον" in the *Phaedrus* to convey the concept that the subject cannot not move. Motion is the intrinsic essence and nature of the subject, making it impossible for it to be motionless, even for one moment.[150] And it can be further confirmed by Socrates' claim in step (4) that the self-mover is always in motion because it "οὐκ ἀπολεῖπον ἑαυτό" (does

[149] Blyth, 1997: 194-195.
[150] Cf. Bett, 1986: 6.

not abandon itself). Therefore, in step (2), Socrates announces that he is going to demonstrate what cannot not move (in other words, what is moving by its nature) is immortal.

However, direct demonstration of this proposition may prove challenging, prompting Socrates to search for an equivalent proposition of "τὸ…ἀεικίνητον ἀθάνατον". Step (3) provides a crucial observation. What moves something else or is moved by something else will be destroyed when it stops moving. Therefore, what is moved by external forces is not always in motion and is not immortal. While it does not strictly demonstrate that what is not moved from outside—namely, what is a self-mover—is immortal, it strongly implies that what is always in motion—that is, what cannot not move by its nature—must be a self-mover (4).

It is worth noting that some scholars mistakenly infer an unspoken deduction: a self-mover is immortal, since it is always in motion (4) and what is always in motion is immortal (2). However, this extrapolation goes beyond the text, as Socrates provides no explicit indication of this deduction. Therefore, the argument has not yet proven that entities consistently in motion are immortal. Nevertheless, given that the self-mover is always in motion (4), if it is demonstrated to be immortal, then τὸ ἀεικίνητον is undoubtedly immortal. So Socrates turns to argue the immortality of the self-mover after (4).

The self-mover is the origin of everything else that moves (5). Because all generative things must come from some origin which is not generative (7), but the origin itself cannot come-to-be according to its definition ((6);

(8)). At the same time, the origin also cannot be destroyed, otherwise, the generative things would lose their origin and cannot come-to-be, and the whole cosmos would collapse ((9)-(12)). Therefore, the self-mover is successfully proved to be the origin of every generative thing and it is explicitly immortal.[151]

Finally, Socrates argues that the soul is this immortal self-mover ((13)-(14)). The reason is that the soulless things are moved from the outside, while what has a soul moves from the inside. Obviously, this reappears the critical steps (3) and (4) in which Socrates makes a clear distinction between what moves itself and what is moved by others. Here Socrates' idea is straightforward: the soul is not moved by anything else, on the contrary, it serves as the source of its own motion and moves by virtue of its inherent nature (13). Therefore, the soul is the self-mover and hence it is immortal (14).

Undoubtedly, the sole presupposition underlying this argument is that the soul is caused by its own nature to move. As discussed in the first chapter, the idea that the soul owns the inner essence of motion is widely shared by the pre-Socratic philosophers, such as Thales (DK11 A22a) and Anaxagoras (DK59 B12). In the *Cratylus*, Socrates offers an etymological analysis of the 'Soul,' suggesting that it causes the body to live and gives it the power to breathe—to be revitalized (*Crat.* 399d-e). While another view—"τὸ ἀεικίνητον ἀθάνατον" (what is always in

[151] As Nicholson argues, contrary to Hackforth's view, it is not necessary for everything to be directly caused by the self-mover. Rather, the generative things could exist in great casual chains and the self-mover is only the ultimate reason of it. The self-mover, as the origin, merely needs to push down the first domino. Cf. Nicholson, 1999: 159.

motion is immortal) and the soul is such an eternal moving subject, while akin to Alcmaeon's famous doctrine, represents a derived result of the argument rather than an axiomatic premise. The self-mover is demonstrated to be immortal, and what is always in motion is argued to be self-mover. Even if Plato drew inspiration from Alcmaeon or other predecessors, his objective here is to establish a concrete philosophical foundation for this idea, rather than merely accepting it as an *endoxon*. But the essential question emerges again: why does Socrates introduce "τὸ ἀεικίνητον ἀθάνατον" as a necessary claim? Why cannot the soul just be an intermittent thing which does move itself but does not persistently remain in motion?

The primary reason lies in Plato's conception of immortality and his fundamental principle of Being. As previously argued, when Socrates refers to "τὸ ἀεικίνητον", he primarily implies that the thing is by its nature to move and cannot not move. Consequently, it is in a perpetual state of motion. Notably, 'always being *F*' represents the standard formulation of immortality in Plato's dialogues. In the *Cratylus*, Socrates suggests that the Forms remain unchanging and maintain the same state (*Crat*. 439d-e). Likewise, Diotima asserts in the *Symposium* that the Form "always is and neither comes to be nor passes away…it is always one in form…this does not become the least bit smaller or greater nor suffer any change" (*Smp*. 210e-211b). Namely, Form never changes between *F* and not-*F* like the sensible particulars. And as previously mentioned in the Affinity Argument of the *Phaedo*, the soul is immortal because it is akin to the Form, which is described as "ever the same and in the same state" (*Phd.* 78d2-3) and "divine, deathless, intelligible, uniform, indissoluble, always the same as itself" (80b1-3). This stems from Plato's acceptance

of the Parmenidean principle of What-is. What-is always is, so it always remains the same, otherwise it has to undergo a generation. Then obviously, only what always remains the same is immortal. Therefore, if the soul is immortal, it has to be 'always being *F*' and cannot not be *F*. Given that the nature of the soul is to move (13), the soul ought to move eternally and ceaselessly. If the soul does not remain in perpetual motion but instead moves intermittently, it would necessitate generation and destruction.

In addition, it is essential to consider that the soul is posited to possess an inherent nature of perpetual motion. To remain static would fundamentally violate the essence of the soul, compelling it to deviate from its self-identity and enter a state different from its nature. Consequently, it becomes explicit that the soul cannot maintain its distinct identity and is subjected to the generation when its motion ceases. This would effectively blur the distinction between the soul and soulless entities. Soulless entities, moved externally, indisputably rely on an external source to sustain their motion, and they cease to exist when their motion halts (3). The cessation of motion signifies their inevitable collapse and destruction (12). Then, for soulless entities, being in motion and being at rest represent two distinct and consequential states. So through starting or ending such a motion, the soulless actually comes to be or destroys. Consequently, if the soul were capable of coming to a halt, it too would be subjected to the processes of generation and destruction in a parallel manner. Accordingly, the soulless possesses generations while the soul, in its perpetual motion, never desists from its own nature and eternally undergoes non-generative motion. We have already been very familiar with this distinction between generation and non-generative

motion. Thus, "τὸ ἀεικίνητον ἀθάνατον" is essential for the nature and immortality of the soul.

And what sorts of non-generative and eternal (self-)motion do the soul precisely undergo? Plato abstains from providing an exhaustive and explicit list. Instead, he tells a myth, namely the chariot metaphor. The human soul is said to be like "the natural union of a team of winged horses and their charioteer", one horse is beautiful and good, and the other is much worse (*Phdr*. 246a-b). And then, the motion of the soul or the chariot in this story includes: (a) The soul looks after all soulless things (245b6); (b) it travels about the heaven and comes to be different shapes at different times (ἄλλοτ᾽ ἐν ἄλλοις εἴδεσι γιγνομένη) (246b6-7). The former contains: (c) the soul follows the gods by climbing to the high tier at the rim of heaven (247a8-b1); it then (d) stands on the high ridge of heaven (247b7-8) and (e) gazes upon what is outside heaven—namely, the Forms or the knowledge (247c1-2; 247d5-e2); and finally (f) it is brought around to where it started (247d4-5). And the phrase "come to be different shapes" infers: (g) because of the divine, it grows perfect wings by which it can fly high (246b7-c1; 246d8-e1); and (h) due to the ugliness and foulness, the wings of soul shrink and disappear, then the soul wanders and embodies (246c2-6). Besides, (i) the outstanding soul is nourished and educated by knowledge (247d1-5), and (j) the soul which does not follow the god closely may lead to disorderly struggles and damage to its plumage. It can only nourish itself by opinions (248a6-b5).

Given that Socrates has already established the soul's immortality and immunity to generation or destruction, all the motions described above must be considered non-generative. Even when asserting that the soul

"comes to be different shapes" (b), Plato does not suggest that the soul undergoes any generation. It is essential to recognize that Socrates is employing a myth and metaphor here, and he does not suggest that the soul genuinely undergoes metamorphosis. On the contrary, the soul must transcend the empirical and perceptible realm. Moreover, all of those motions appear to be the activities of the soul and can be categorized into three groups: (I) the 'travelling' of soul [(a), (b), (c), (d), (f)]; (II) the cognition of soul [(e); (i); (j)]; (III) the growth and fall of soul, as well as its embodiment and reincarnation [(g); (h)]. As Blyth points out, *Erōs* is the fundamental power behind all these (self-)motions.[152] According to Socrates' story, the soul is driven by *Erōs*, yearning for Beauty. When it encounters a godlike beautiful face or body, the soul shudders and its wings grow from their roots (250e-252b).

And undoubtedly, all these motions belong to the (self-)motions and eternal motions of the soul. By undergoing them ceaselessly, the soul is immortal. Although these motions introduce variations to the soul, they do not compel it to relinquish its inherent identity and transform into something other than itself. This ontological foundation probably comes from the theory of change presented in the *Phaedo*. In that dialogue, Forms are considered the cause of all generative motions. Given that the motions of the soul in this context bear no relation to the participation in or loss of Form, they are permissible as non-generative and intrinsic to the soul.

[152] Blyth, 1997: 193. Also cf. Ostenfeld, 1992: 326.

4. Rethinking Plato's First Model of Change and Motion

Now we are able to see the comprehensive picture of Plato's first model of change and motion. We have previously contended that this model represents Plato's earliest endeavour to furnish a systematic and philosophical account of the experiential world's perpetual flux—a perspective significantly influenced by the ideas of pre-Socratic philosophers. In the *Cratylus* and the *Symposium*, Plato examines the phenomena of change with a distinctly Heraclitean approach, asserting that everything, aside from Forms and the immortal, exists in a perpetual state of change. But diverging from Heraclitus and his followers, Plato simultaneously embraces the Parmenidean principle of What-is and interprets these changes as instances of generation. Consequently, sensible and mortal entities are in a constant state of becoming, perpetually *F* and not-*F*. This underlying pattern, as we have previously noted, has a rich historical lineage tracing back to the early Ionian philosophers. Plato's remarkable contribution lies in his introduction of the Form theory to elucidate these manifestations of change, thereby refining his perspective on change and motion. In the *Phaedo*, Plato posits that Forms serve as the causal agents of change, providing a compelling rationale for the generative nature of changes in sensible particulars. Namely, the thing *x* becomes *F* from not-*F* by participating in Form *F*-ness, and when it loses Form *F*-ness it reverts to not-*F* again. Further, by participating in the Form *F*-ness, an *F*-in-*x* generates in *x* and makes *x* undergo a generation, while the *F*-in-*x* perishes and *x* undergoes destruction when *x* loses the Form *F*-ness. This theoretical framework introduces the possibility of non-generative change. Prior to the introduction of the Form theory, exemplified in works like the *Symposium*, Plato concedes that all forms of change and motion are generative, as

they inherently entail a transformation into something distinct from the original state. This perspective aligns with the Eleatic position. But according to the new story of the *Phaedo*, it is the Form that causes the subject to change generatively. Thus, the motion which does not rely on participating or losing a Form is certainly not generative. Apparently, it is the introduction of Form theory which largely modifies the Parmenidean principle of What-is and hence allows some sorts of motions to be non-generative. The most conspicuous instances of non-generative motions manifest in spatial movements and the multiple motions of the soul, as we have seen in the *Republic*, the *Phaedo* and the *Phaedrus*. Therefore, Plato's first model of change and motion, conceived as his initial attempt to comprehend and explicate the phenomena of change, relies heavily on the Form theory advanced in his middle dialogues. This theory, lauded for its conciseness and sophistication, seemingly resolves the enigma of change. However, several aspects warrant further examination, prompting Plato to develop a new theory in his later dialogues.

(1) The passive sensible particulars. According to this model, the world is full of all kinds of changes and motions. The sensible things are always changing generatively between opposites, while the soul remains in perpetual self-motion, moving both itself and external entities. Correspondingly, two distinct causal factors are at play. The Form is the direct cause of all generative changes of the sensible things, whereas the soul acts as a mover of both itself and sensible things. And the sensible particulars seem to be entirely passive, having no immanent power to move, for they do not possess the nature to initiate a change or motion.

In the *Cratylus*, Socrates offers a plausible etymological interpretation of the word *theoi* (gods), positing that the earliest inhabitants of Greece believed the gods—the sun, moon, earth, stars, and sky—to be in constant motion, as it was inherent in their nature to run (*thein*) (*Crat*. 397c-d). This concept bears a resemblance to Alcmaeon's argument concerning the immortality of the divine (DK24 A12). Furthermore, Socrates asserts that the name *psuchē* (soul) signifies the belief of the name-givers that the soul serves as the 'nature-sustainer,' sustaining and supporting the body, initiating its vitality and motion (399d-400a). Hence, perpetual motion is deemed intrinsic to the nature of the soul (including gods), while the soul also serves as the origin of motion in physical objects, which are passive and lack an inherent capacity for self-initiated motion. Plato unequivocally endorses this viewpoint in the *Phaedrus*. As we have seen in this dialogue, Socrates emphasizes that the soul, by its very nature, moves itself and other entities, while soulless sensible entities lack an inherent origin to come-to-be. In the absence of the soul as the origin, the sensible particulars would fall in ruin and come to a stop (*Phdr.* 245c-246a). Consequently, sensible entities are envisioned as wholly passive.

Furthermore, the notion of the passivity of sensible entities is also evident in the *Phaedo*. Within this dialogue, Forms are posited as the cause behind the generation, existence, and dissolution of sensible entities. Simmias becomes high because the Highness approaches and the high-in-Simmias generates (*Phd*. 102d-103a), while Simmias himself is not by itself becoming high or short. Hence, without the participation of Form, Simmias or other sensible beings would never undergo any generation and destruction.

Consequently, within the framework of the first model of change and motion, sensible entities are characterized as passive entities incapable of initiating change or motion. Although they are perpetually in motion and subject to change, these changes are never motivated by their own nature. Nevertheless, Plato challenges this premise in his later dialogues, such as the *Philebus*, the *Timaeus*, and the *Statesman*, by recognizing the existence of inner motion within sensible entities—specifically, disordered motions.

(2) Forms in pairs and the negative Forms. As we have made clear, the theory of change in the *Phaedo* and the *Republic* undeniably hinges on Plato's conceptualization of Forms. However, this pivotal idea presents a potential paradox, as it appears to necessitate the recognition of the existence and relevance of negative Forms.

For considering that Forms are the causal agents behind the alteration of sensible particulars between opposites, it logically follows that Forms must exist in pairs to facilitate these changes. Without such paired Forms, the sensible particulars would be incapable of undergoing change. For instance, the transition of water between the states of hot and cold, or the transformation of Simmias from a shorter to a taller stature, as delineated in the first model of change and motion, necessitates the existence of Hotness and Coldness, as well as Tallness and Shortness. This line of reasoning suggests that all Forms must inherently exist in pairs.

At the same time, in addition to those Forms closely associated with sensible properties, there also exist Forms that transcend the realm of

sensory perception, encompassing prominent moral values. These evaluative Forms play a pivotal role within Plato's theory of Forms and often serve as the primary focus when he deliberates on the concept of Forms. For example,

> "Therefore, if we had this knowledge, we knew before birth and immediately after not only the Equal, but the Greater and the Smaller and all such things, for our present argument is no more about the Equal than about the Beautiful itself, the Good itself, the Just, the Pious and, as I say, about all those things which we mark with the seal of 'what it is,' both when we are putting questions and answering them." (*Phd.* 75c7-d4)

> "If those realities we are always talking about exist, the Beautiful and the Good and all that kind of reality, and we refer all the things we perceive to that reality, discovering that it existed before and is ours, and we compare these things with it, then, just as they exist, so our soul must exist before we are born." (76d7-e4)

The Forms of the Beautiful, the Good, and the Pious are undeniably evaluative in nature, distinguishing them from sensible Forms such as the Large, the Small, the Hot, and the Cold. However, the presence of these evaluative Forms raises the question of the existence of their negative counterparts, such as the Ugly, the Bad, and the Impious. This question emerges from the premise that Forms must exist in pairs to facilitate the generative change of particular entities. Without the existence of negative Forms, the transition from one state to its opposite, such as from ugliness

to beauty or from impiety to piety, would be conceptually problematic. Plato hints at the existence of negative Forms in his works. In the Final Argument of the *Phaedo*, the soul is believed to perpetually bestow life upon the body, indicating its participation in the Form of life. As death stands as the antithesis of life, it logically follows that there must exist a Form of death (105d ff.). Besides, in the *Republic*, when Socrates introduces the concept of Forms, he states, "And the same account is true of the just and the unjust, the good and the bad, and all the Forms. Each of them is itself one, but because they manifest themselves everywhere in association with actions, bodies, and one another, each of them appears to be many." (*Rep*. 475a5-8) This passage explicitly suggests the participation of negative Forms, such as the bad and the unjust, in the realm of sensible things, leading to their coming-to-be.

However, the concept of negative Forms presents an inherent challenge. Given that Forms are presumed to be inherently good and divine, the existence of negative properties or values as corresponding Forms poses a philosophical quandary. Particularly noteworthy is Plato's designation of Forms as the offspring of Goodness in the *Republic* (*Rep*. 508c). Despite this initial recognition of negative Forms, Socrates notably refrains from further elaborating on them in the core books of the *Republic*, hinting at a potential internal contradiction within the concept of negative Forms. A more thorough examination of this issue will be undertaken in the forthcoming discussion of the *Parmenides*.

(3) The Parmenidean principle: The ontological criterion for identity, sameness and difference. The most critical premise of the first model of change and motion is undoubtedly the refined Parmenidean principle of

What-is. The Eleatics advocate that the What-is is strictly identical to itself, and any sort of motion and change would force it to undergo a generation by becoming What-is-not. Consequently, Plato's viewpoint that all changes are generative aligns with the Eleatic perspective. However, the first model, by attributing generative change to the participation in Forms, limits the scope of generative changes. Given that the generation is now understood as caused by the participation in a Form, those motions which are irrelevant to Forms are clearly non-generative. Namely, according to this model, the change between opposites deprives the self-identity of the subject, while the non-generative motion will not destroy the latter.

One more point needs to be clarified. Since all changes between opposites can make the thing undergo a generation, every property seems to be equally essential for the identity of a thing. This is the critical reason why all those changes can be generative. One may question this view, for Plato does suggest that some properties are more essential than others. In the *Phaedo*, Socrates discusses the melt of snow: the snow will not admit the hot, when the hot approaches it will be destroyed (*Phd*. 103d). And then he comments, "It is true then about some of these things that not only the Form itself deserves its own name for all time, but there is something else that is not the Form but has its character whenever it exists." (103e2-5) Accordingly, one may reduce that the sensible thing may remain its existence and identity as long as it still possesses the essential property and participates in the Form from which it acquires its name and character. For example, the snow is still the same snow as long as it is cold and not melted by the hot. So coldness is the essential property of snow. If so, only by becoming hot the snow undergoes generation. Other changes and

alterations, such as becoming black, do not result in a substantial generation.

However, even though the coldness is more important than other properties, it does not necessarily exclude the generative feature of other changes. It will be beneficial to introduce White's distinction between kind-essence and particular-essence.[153] The former is the essence of the whole genus of things, while the latter is only for a certain particular. Hence, the cold is essential for every snow. A snow does destroy when it loses the cold. But at the same time, other properties are particular-essences of the certain snow. By becoming black, although the snow-black is still a kind of snow, it becomes generatively from the previous snow-white. This clearly recalls Diotima's speech: the mortals are only "said to be the same" but in fact is always replaced by the new young ones. Although the previous thing and its successor share the same kind-essence and undoubtedly belong to the same kind, strictly speaking, they are completely different things. This thought, again, is built on the Parmenidean principle of What-is. No matter what a tiny change will make the What-is destroy and What-is-not come to be. And What-is-not is always completely and thoroughly different from What-is.

Nevertheless, this is not Plato's final theory of change and motion. In the next chapter, we will see Plato's serious criticisms of it. We may offer one point which is apparent in the meantime. Namely, if the changes are generative because they make the things become different, do the non-generative motions really unable to bring any difference to the things?

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[153] Cf. White, 1981. And this issue is closely connected with the debate whether Plato advocates a bundle theory.

Do the multiple motions of the soul change no aspect of the soul? The Eleatics, indeed, do not suffer from difficulty, for they do not admit the possibility of non-generative motions. But since Plato limits the scope of generative changes by introducing the theory of Form, he must confront the problem that his theory lacks an unambiguous description of the ontological status of those non-generative motions if they do not make things become different.

Chapter III Plato's Reflections of the First Model in the *Theaetetus*, *Parmenides* and *Sophist*

As discussed in the previous chapters, Plato's exploration of change and motion finds it origins in the debates among pre-Socratic philosophers, and then brings forward the First Model as his primary attempt to deal with this problem. He adapts several insights from those early philosophers who were influential at his age: he concurs with the early Ionic thinkers that everything changes between opposites; and embraces Heraclitus' doctrine that every sensible thing is always in flux. At the same time, Plato is convinced by the Parmenidean principle that What-is always is and What-is-not is not, and which leads to the inherent generative essence of change; furthermore, he holds the conviction that soul is immortal and ever-moving. Plato synthesized these views, marking the onset of his dialectical inquiry. It necessitates him to rethink and re-evaluate these perspectives within his own theoretical framework. In presenting his first model of change and motion, Plato first delineates the concept of Form and the Two-World Theory. He advocates that Form always takes the role of What-is in the Eleatic philosophy, while the sensibles always oscillate generatively between opposites and never really are. Moreover, the mechanism underlying change is attributed to Form. Specifically, the sensible thing can only change generatively to be *F* by participating in the corresponding Form *F*-ness. This mechanism, in turn, establishes the classification of motion, indicating that changes resulting from sharing in a Form are generative, whereas motions independent of such participation—such as locomotion or that of the soul—are non-generative.

Though being quite subtle, Plato's first model of change and motion is unfortunately not flawless. He intensively examines its foundation and identifies several significant vulnerabilities in the *Theaetetus*, *Parmenides* and *Sophist*. Even though these dialogues do not belong to the same Platonic "tetralogy" arranged by Thrasyllus—according to him the *Theaetetus* and the *Sophist* are parts of the second tetralogy but the *Parmenides* is the first dialogue of the third one, their interconnectedness, both concerning the backdrops or scenes of the interlocutors' conversations and the substantial philosophical contents which we mainly care about, is undeniable. In the *Theaetetus*, Socrates announces that he is going to look into the doctrines of both the proponents of Flux theory and of Parmenides as well as his adherents who champion the immovable whole (*Theaet.* 180e-181a). But he does not deliver on this promise in the following text, refusing to examine Parmenides' theory after criticizing the extreme Flux (183d-184a). And Socrates claims, "Parmenides seems to me, in the words of Homer, to be 'reverend' and 'awful'. I met him when I was very young and he was a very old man; and he seemed to me to have a wholly noble depth. So I am afraid we might not understand even what he says; still less should we attain to his real thought" (183d-184a). This meeting between Socrates and Parmenides, as well as Parmenides' deep wisdom, is later revealed in detail in the *Parmenides*. And eventually, in the *Sophist*, the interlocutors continue to delve into the divarication between those who support the Flux theory and the Parmenidean school in the alleged "battle between gods and giants", culminating in a comprehensive reflection on the ontological foundation of Parmenides' doctrine (*Sph.* 246a-249d).

In this chapter, we will mainly focus on the reflections and critiques presented in these dialogues regarding Plato's first model of change and motion. This model is threatened in the following aspects:

(1) **The Two-World Theory.** The *Theaetetus* challenges Plato's assertion that the sensible are always in flux by changing ceaselessly and generatively. At the same time, the *Sophist* seems to contend that Forms are able to move by participation and being acted upon. This seriously blurs the lines between the realm of becoming and of being.

(2) **The Mechanism of Change.** The efficacy of Form, moreover, as the reason for the change is questioned. The *Theaetetus* and the *Parmenides* hint that the scope of Being might be restricted, preventing it from encompassing all sorts of changes. Besides, the participation of Form is also doubted whether it could serve as the core of the mechanism of change in the *Parmenides*.

(3) **The Classification of Motion.** According to the first model, the general change includes two sub-kinds, the generative change resulting from sharing in a Form and non-generative motion. But in the *Parmenides*, it is suggested that within the Parmenidean framework all motions must be generative and there is no room for the alleged non-generative motion. While in the *Sophist*, the Eleatic stranger argues that a kind does not undergo a generative change when combining with another kind. If so, the classification of motion must turn out to be untenable in the end.

And further, these reflections are built on two pivotal insights running through these texts:

(4) **The Scope and Structure of Form.** The concept of 'Form' is thoroughly rethought. Not only does Plato suggest a restricted scope of Form, but he also offers a renewed understanding of its ontological structure and essence.
(5) **The Reflection of Parmenidean Principle.** Correlatively, he shows that the inherent and fundamental flaw in his first model arises from its uncritical adoption of Parmenides' principle that What-is always is and What-is-not is not. This is alluded to in the *Theaetetus* and the *Parmenides* and then expounded upon in the *Sophist*.

Hence we see that each part of Plato's first model is more or less attacked in the three dialogues, and the foundation of this model is thoroughly examined. As subsequent discussions will elucidate, these critiques, carefully organized in a dialectical way and permeating these three dialogues, signify Plato's introspective criticism of his previous theory and lays the metaphysical groundwork for a revised model of change and motion.

1. The *Theaetetus* and the Flux theories

In preceding dialogues, Plato establishes the first model of change and motion accepting a flux theory influenced by both Heraclitus' opinion that all sensible entities are always changing and the Eleatics' insight that all these changes are generative. And now the *Theaetetus* provides a significant occasion to scrutinize this premise. For on the one hand, the

first part of the *Theaetetus* (*Theaet.* 151-186) delivers the richest detailed discussions of flux theory after the *Cratylus*. Yet on the other hand, this dialogue also includes Plato's prominent refutation of Heraclitean flux (179c-183c).

The central question then arises: How does Plato interpret the flux theory, and what is his real stance towards it in the *Theaetetus*? Cornford, representing the traditional Unitarianism position, posits that Plato, in this dialogue, continues to adhere to the Two-World Theory. And he does not entirely discard Heraclitus' flux theory but partly embraces it by confining it to the sensible realm. Then, for Cornford, what Socrates really criticizes is that Heraclitus and many pre-Socratic philosophers fail to recognize the realm of the unchangeable Forms. Therefore, Plato's position in the *Theaetetus* is not novel but just echoes his earlier dialogues.[154] By this interpretation, the Flux theory is not erroneous but merely incomplete due to its lack of Forms. Conversely, the Revisionism position diverges from Cornford and the Unitarianism reading. It argues that metaphysical theory in late Platonic dialogues does not rely on the middle theory of Form, especially after the critiques of Forms in the *Parmenides*. Importantly, Socrates never mentions the term 'Form' in the *Theaetetus*. Burnyeat further contends that in this dialogue Plato does not show any partial acceptance of the Heraclitean flux at all. The Heraclitean flux theory, then, is not rejected because of its neglect of the eternal Form. Instead, what Socrates precisely argues against is not this flux theory but the Protagorean epistemology built on this flux, and the latter in turn is

[154] Cornford, 1935.

self-refuted by leading to the 'impossibility of language' in an alleged *reductio ad absurdum* argument.[155]

Yet, both readings are questionable respectively. They all built on the assumption that Socrates simply addresses a singular and consistent Flux theory, and attributes it to Heraclitus. Based on this understanding, Unitarianism believes that Socrates' critique of this Heraclitean flux suggests his own metaphysical theory to save the world in flux, while Burnyeat and his followers intend to regard this Heraclitean flux merely as a premise of the whole reduction argument which is indeed irrelevant with Plato's own thinking of flux. However, this assumption warrants scrutiny. Upon close examination of this section, it is evident that Socrates does not limit his discussion to a single Flux theory in the *Theaetetus*, but underscores two versions of flux which are not entirely coherent with each other. Plato's nuanced stance is clear. Through a detailed analysis of Socrates' various flux discussions, it emerges that: the first flux aligns more with the historical Heraclitean flux, while the second and stricter one, which Socrates mainly criticizes, shares the common character of extreme ceaseless and generative change with Plato's own understanding of flux in his first model. Using a self-refutation argument regarding this second radicalized Flux, Socrates demonstrates that genuine knowledge—spanning epistemology, ethics and political thinking—cannot be based on the perpetually generatively-changing things. Consequently, unlike the Unitarianism

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[155] Burnyeat, 1990: 7-9. Burnyeat attributes the invention of this reading to Bernard Williams, but undoubtedly it is because of Burnyeat's effort that this view has gained wide influence. Cf. Burnyeat, 1990: xiii; 9. And Chappell summarizes the difference between Unitarianism and Revisionism reading of the *Theaetetus*. Cf. Chappell, 2004: 16-24.

interpretation which asserts that here Socrates repeats his theory presented in the middle dialogues and the new reduction reading which denies this argument includes any notable discussion of Plato's own flux theory, Socrates indeed does not solely reiterate previous ideas presented in prior dialogues. but also offer a potential rebuke of Plato's initial model of change and motion. For this purpose, this discussion will proceed in two steps: (1) A review of his elaboration of Protagoras' and Heraclitus' Flux theory; (2) an explanation of his reflection on this flux doctrine.

1.1 Multiple Flux Theories Argued in the *Theaetetus*

Contrary to prevalent opinion, Socrates successively delineates at least two kinds of Flux for distinct purposes in the *Theaetetus*:

(I) **The primary Heraclitean Flux**: everything is the result of motion.

(II) **The stricter Heraclitean Flux**: everything is motion and changes generatively.

The second Flux is obviously more radical than the first one. The key distinction is that the first flux more or less permits a degree of stability, while the second one mandates that everything is ceaselessly changing and continuously becoming a completely and substantially different thing—namely, it is always changing generatively. They serve not only to buttress Protagoras' epistemological theory, but also a wide-spread ethical and political view of the sophists. The stricter Heraclitean Flux is Socrates' main critique target. Let's examine them in turn and try to illuminate Plato's real perspective on the Heraclitean flux in the text.

(1) The Primary Heraclitean Flux

In the *Theaetetus*, Socrates introduces the primary Heraclitean flux when he and Theaetetus for the first time attempt to justify Protagoras' notable epistemological doctrine. Theaetetus defines 'knowledge' as 'perception' (151e), and Socrates claims this as identical to Protagoras' Man-Measure Doctrine, which posits that "Man is the measure of all things: of things which are, that they are, and of the thing which are not, that they are not" (152a). For instance, "the same wind is blowing, one of us feels cold and the other not", so it is cold to someone who feels the wind as cold while hot to another who feels it as hot (152b). Socrates then suggests that the essence of Protagoras' Man-Measure Doctrine, termed the 'secret doctrine', can be articulated as,

> "I will tell you; and this, now, is certainly no ordinary theory—I mean the theory that there is nothing which in itself (αὐτὸ καθ' αὑτὸ) is just one thing: nothing which you could rightly call anything or any kind of thing. If you call a thing large, it reveals itself as small, and if you call it heavy, it is liable to appear as light, and so on with everything, because nothing is one or anything or any kind of thing." (152d2-6)

Obviously, according to this secret doctrine, nothing is *per se* one thing. Accordingly, no object is intrinsically characterized by any property. Otherwise, it would imply that an object *per se* could possess contradictory attributes by being both large and small, heavy and light—Burnyeat calls them 'conflicting appearances'. Burnyeat asserts that, logically, the same entity cannot be both *F* and not-*F* at the same time, therefore the Protagorean doctrine requires every property to be relational and not intrinsic. Hence, the wind *is* not *inherently* cold or hot,

but *is* hot in relation to someone while cold in relation to another.[156] But what is the ontological foundation for this secret doctrine? The answer is indisputably the flux theory.[157] Indeed, being both *F* and not-*F* is the typical Platonic way to signify the change and flux of the sensible. In the *Cratylus* Socrates argues that it is not correct to describe the thing always in flux as "it first that it is this, then that it is such and such", because at the very instant we are speaking, it is inevitably and immediately becoming a different thing (*Crat*. 439d8-11). This is explicitly the same reason as it is argued in the *Theaetetus* cited above. Besides, in the *Symposium*, Diotima also suggests that the sensible things that are always in flux are both *F* and not-*F* at different times, in relation to different things, or for different ones (*Smp*. 210e-211b). And in the *Phaedo*, similarly, Socrates hints that the sensible which are always changing "never in any way remain the same as themselves or in relation to each other" (*Phaed.* 78e). Now in the *Theaetetus*, Socrates does continue to elaborate the flux as the metaphysical premise of the secret doctrine.

What is really true, is this: the things of which we naturally say that they 'are', are in process of coming to be (γίγνεσθαι), as the result of movement (φορά) and motion (κίνησις) and blending with one another. We are wrong when we say they 'are', since nothing ever is, but everything is coming to be. And as regards this point of view, let us take it as a fact that all the wise men of the past, with the exception of Parmenides, stand together. Let us take it that we find on this side

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156 Burnyeat, 1990: 12-14.

157 Fine correctly points out that Burnyeat's reading completely ignores the change and Heraclitean doctrine mentioned in the following text. And she further argues that according to Plato's Protagoras, "if an object appears different, then it becomes different and so it changes." Cf. Fine, 1996: 126-7.

Protagoras and Heraclitus and Empedocles; and also the masters of the two kinds of poetry, Epicharmus in comedy and Homer in tragedy. For when Homer talked about 'Ocean, begetter of gods, and Tethys their mother', he made all things the offspring of 'flux and motion' (ῥοῆς τε καὶ κινήσεως). (*Theaet.* 152d-e)

The primary Heraclitean Flux doctrine—that everything is the offspring of motion—is claimed to serve as the foundation of the secret doctrine and is a consensus among most pre-Socratic philosophers except for Parmenides. This Heraclitean doctrine may seem to be very familiar to us, for in the previous dialogues sensible things are always claimed to move and change ceaselessly. However, it is not difficult to realize that the Heraclitean flux doctrine here includes two essential differences.

First, in this dialogue, Socrates diverges from Plato's middle dialogues where he focuses on the notion that 'everything itself is changing'. Instead, now he posits that 'everything comes to be as the offspring of motion'.[158] Namely, everything, as he emphasizes, is not *per se* one thing, but comes to be as a result of motion. The sensible things that are in the process of becoming are produced by those 'movement, change and blending with each other'. Socrates further provides the following "good enough evidence" to substantiate this theory: (a) movement and friction give rise to heat or fire which in turn generate and control everything else; (b) the growth of living creatures also depends upon these movements and friction; (c) bodily condition deteriorates with rest and idleness while it can be preserved for a long time through exertion and motion; (d) learning and study as motions enable the soul to gain knowledge, be

[158] Cf. Bostock, 1988: 46-47.

preserved, and become better, but when the soul does not learn or study, being in a state of rest, it fails to acquire knowledge and forgets what it has already learned; (e) the conditions of land and sea will be destroyed because of rest but preserved by motions; (f) all things are preserved as long as the revolution of sun continues, but if it comes to a standstill, all things will be destroyed. (153a-d).

In these cases, the sensible things come to be and are sustained as the production of some change and motion. Concurrently, the picture of Homer, Protagoras and Heraclitus' flowing world is depicted. All things are predisposed to decline and destroy, unless they come to be and are preserved by specific changes and motions. As Socrates summarizes, "being and becoming are a production of motion, while not-being and passing-away result from a state of rest" (153a6-7). Even seemingly stable phenomena—such as healthy body condition, potent memory, and this enduring world—are not utterly static but only preserved by some changes and motions, analogous to a boat which, being static in a stream and propelled by its engine, sails against the current.

Another essential difference pertains to the ontological implication of change. In the first model, the change—at least the change between opposites—must be generative, compelling the sensible thing to become something completely and substantially different due to Parmenides' principle of What-is. However, here it is suggested that an entity, despite undergoing a change, might still retain its identity. This is evident when Socrates tries to explore how the Heraclitean flux could justify Protagoras' epistemology. He posits that the white colour, as an example, is not a

distinct entity unto itself, otherwise it would not be in the process of becoming (153d-e). He elucidates,

> "Let us follow what we stated a moment ago, and posit that there is nothing which is, in itself, one thing. According to this theory, black or white or any other color will turn out to have come into being through the impact of the eye upon the appropriate motion; and what we naturally call a particular color is neither that which impinges nor that which is impinged upon, but something which has come into being between the two, and which is private to the individual percipient." (153e4-154a3)

According to the primary Heraclitean flux doctrine, everything not really 'is' but 'comes to be' as the result of motions and changes. Thus, the white colour 'is' not intrinsically, but 'comes to be' as the production of the impact and motion between the eye and its observed object—say, a stone. Therefore, the stone is not one thing in itself as required by the secret doctrine. It might appear white to one observer and grey to another or under different circumstances. Thus, the stone becomes a white stone or grey stone when it is perceived as white or grey. However, it is crucial to note that in the meantime, Socrates does not contend that the stone or the eye itself undergoes any substantial and generative change in this process. Instead, what emerges during this change is the attribute or colour of whiteness. Consequently, even if the subject does become *F*, and even if it thereby ought to be said not to be in itself one thing or one kind of thing, it does not mean that this entity comes to be by substantially becoming something entirely different. This is explicitly the

aim of the whole argument. At the very beginning, when Socrates initially introduces Protagoras' Man-Measure doctrine, he elucidates it by arguing that "when *the same wind* is blowing, one of us feels cold and the other not" (152b2-3). Thus, the wind is not *one* thing by itself because it *becomes* hot or cold when it is perceived by someone. And during this process, the wind is still the same wind. These attributes, hot or cold do not reside inherently in this wind, but arise in the process of perception, explaining how the same wind can be both hot and cold.

So this primary Heraclitean flux markedly differs from Plato's first model of change and motion. In that model, change must be generative and deprive the self-identity of the entities, whereas here, the becoming of a subject seems to be compatible with its identity, allowing it to maintain being the same amidst change. This may align with the renowned fragment of Heraclitus: "*As [one] and the same thing* there exists in us living and dead, and the waking and the sleeping, and young and old: for these things having changed round are those, and those things having changed round are these ones." (DK22 B88) As we have sufficiently argued, Heraclitus does not advocate the incompatibility between change and identity, a stance which indeed deeply relies on the Eleatic ontology of What-is. Whether Plato himself is aware or not, he objectively portrays a version of Flux aligned more closely with the original thought of the historical Heraclitus. And moreover, these phenomena of flux—such as the wind appears to be hot to someone while cold to others (152b), or the large thing also appears to be small and the heavy thing to be light (152d)—as the private experiences of human beings are never refuted by Plato in this dialogue.

Through this meticulous effort, Plato constructs his understanding of the primary Heraclitean Flux theory, which he believes to be a shared view among most pre-Socratic philosophers. This emphasizes that things are naturally inclined to be destroyed and can only be generated and preserved through certain changes and motions. This primary Heraclitean flux is soon overshadowed in this dialogue where Theaetetus and Socrates' second attempt to justify the first definition of knowledge introduces a more recognized version of Heraclitean flux.

(2) The Stricter Heraclitean Flux

Socrates subsequently introduces the notorious Dice Puzzle (154b-155c) to further probe the Protagorean theory he just argued, but unfortunately, Theaetetus fails to comprehend. Thus, Socrates undertakes a second effort to justify Theaetetus' Protagorean definition of knowledge as perception by uncovering "the veiled truth" in the thought of Protagoras, Heraclitus and others (155d). Undoubtedly, this "veiled truth" also relies on a form of Heraclitean flux. However, this flux theory is much more rigorous than the one previously described. Firstly, the core of flux doctrine is no longer simply that everything is the offspring of change and motion. Instead, each thing itself is a motion.[159] Socrates claims, "These mysteries begin from the principle on which all that we have just been saying also depends, namely, **that everything is really motion, and there is nothing but motion.**" (156a3-5) The earlier Flux doctrine still accommodates some extent of stability. For instance, Socrates mentions the preservation of good condition of body and soul through physical exercise and learning (153b-c). But this new story expels any such possibility completely. Secondly, the changes are now strictly generative for the

[159] Similarly, cf. Crombie, 1963: 12.

subjects. Not only does the property come to be in the motions, but so do the subject and the object themselves. The development of this nuanced Heraclitean Flux theory from its predecessor will be elucidated immediately.

The new Flux theory, then, ties in closely with a refreshed interpretation of Protagorean epistemology's stance on perception. And to satisfy this goal, Socrates does not simply give up the previous flux doctrine. Instead, he redifines it to encompass every motion and change of the perceptual process. First, Socrates contends that according to the 'veiled truth', what is perceived and perception emerge in pairs as active motion and passive motions produced in the perceiving activity (156a-c). And he further elaborates,

> "All these things are in motion, just as we say; and their motion is distinguished by its swiftness or slowness. What is slow has its motion in one and same place, and in relation to the things in the immediate neighborhood; in this way it generates and the offspring are swifter, as they move (φέρεται), and their motion (κίνησις) takes the form of movement (ἐν φορᾷ)." (156c8-d3)

In this paragraph, the motions of these subjects and objects include swift motions and slow motions. According to the previous Heraclitean flux, everything is the offspring of some motion and change. So, the slow motion, confined to its locale nearby, generates the swift motion. These are the so-called 'twin motions'. But what are the slow motion and swift motion? Socrates continues to argue,

> "Thus the eye and some other thing—one of the things, commensurate with the eye—which has come into its neighborhood, generate both whiteness and the perception which is by nature united with it (things which would never have come to be if it had been anything else that eye or object approached). In this event, motions arise in the intervening, sight from the side of the eye and whiteness from the side of that which cooperates in the production of the color. The eye is filled with sight; at that moment it sees, and becomes not indeed sight, but a seeing eye; while its partner in the process of producing color is filled with whiteness, and becomes not whiteness but white, a white stick or stone or whatever it is that happens to be colored this sort of color." (156d3-e7)

In this described process, the eye and stone undergo what is termed as 'slow motion' while the perception and what is perceived are generated as 'swift motions'. The complete process of seeing, indeed, is a bit more intricate including several steps. First, (1) the eye "has come into its neighborhood", it and the stone *"approach"* by moving close to each other, indicating that the eye opens and starts to see. Subsequently, (2) this motion *generates* the perception 'sight' and 'whiteness'. And the perceptions sight and whiteness come to be "in the intervening" between the eye and the stone, as the swifter motion. Finally, (3) the 'sight' and 'whiteness' again, as a pair of motion, result in the *generation* of the seeing eyes and the white stone. Because by filling up with sight, the eye becomes a seeing eye while by filling up with whiteness the stone also becomes a white stone. Therefore, throughout the whole process, the eye undergoes a slow motion: seeing, by which it becomes a seeing eye. And

the becoming of stone is similar. They are termed ‘slow motions’ because, as is reasonable, their processes take a longer duration compared to the swift generation of sight and whiteness.[160] Therefore, a refined formulation emerges: everything in this process is nothing but motion. Namely, since every property generates in some motions according to the primary Heraclitean Flux, the subject or object that carries this property also comes to be in the generation of the property. Socrates postulates, “Nothing, as we were saying before, is in itself any of these. All of them, of all kinds whatsoever, are what things *become* through association with one another, as *the result of motion*” (156e9-157a2). And hence, by this process, no static state is permissible any longer. Everything is nothing but motion.

Moreover, diverging from the primary Heraclitean flux, Socrates’ new story holds that the eyes and stone actually become some completely new thing by becoming the seeing eyes and white stone. The ‘becoming’ here signifies more than a mere alteration of properties, rather it denotes a substantial generation. Socrates continues to assert, “For even in the case of the active and passive motions, it is impossible, as they say, for thought, taking them singly, to pin them down the being anything. There is no passive till it meets the active, no active except in conjunction with the passive, and what, in conjunction with one thing, is active, reveals itself as passive when it falls in with something else.” (157a2-7) Thus, the action of eyes and the stone eventually results in a substantial generation of themselves. Therefore, according to this new Heraclitean flux theory, everything is not just in motion but is continuously being generated, for

[160] Cf. van Eck, 2009: 233-236. But van Eck seems to go too far, for he claims that the eye and stone share some sort of stability during this process.

they only come to be when they become *F* by being in interplay with something else as the result of this corresponding change.

This ontological character is further clarified several pages later when Socrates endeavours to perfect the whole story. He asserts that the combination of different active and passive things will not generate the same things. (159a). Thus, the ill Socrates and healthy Socrates are unlike each other, and they cannot be conflated into one single identity (159b-c). Namely, the illness transforms Socrates, rendering him an entirely distinct individual. And further, when the healthy Socrates tastes the wine, he perceives it as sweet, and at that very moment he becomes a percipient while the wine becomes the sweet wine. In contrast, when the wine is tasted by the ill Socrates, since he is not identical with the healthy Socrates, the wine becomes the bitter wine and the ill Socrates also becomes another percipient who has the perception of bitterness (159c-160a). Thus, the ill Socrates as the percipient of the bitter wine emerges only when this ill Socrates experiences the bitter wine, and only generates in relation to this bitter wine (160a-b). Eventually, Socrates says,

> "It remains, then, that I and it, we whether are or become, are or become for each other. For our being is, by Necessity's decree, tied to a partner; yet we are tied neither to any other thing in the world nor to our respective selves. It remains, then, that we are tied to each other. Hence, whether you apply the term 'being' to a thing or the term 'becoming', you must always use the words 'for somebody' or 'of something' or 'relatively to something'. You must not speak of anything as in itself either being or

> becoming nor let anyone else use such expressions. That is the meaning of the theory we have been expounding." (160b5-c2)

Hence, nothing is able to exist merely in itself. Everything has to dissolute into countless pieces, and each of which only comes into being in relation to another entity. That is how the stricter Heraclitean flux theory can buttress the Protagorean epistemology and guarantee the infallibility of private experience. From this perspective, each fragment of a subject is exclusively linked with a corresponding specific piece of an object. No other individual can really perceive the very same piece of object and acquire the same perception. No one, hence, is able to judge whether another's experience is valid. Accordingly, every perception is unique, private and naturally true. This argument is clearly built on the premise that the process of activity—such as perception—results in the generation of the subject. In other words, all forms of activity, alterations or other changes are all generative, leading to the subject's substantially becoming another thing.

Therefore, this stricter version of Heraclitean flux distinctly diverges from the primary Heraclitean flux argued in the previous text. As previously outlined, the latter does not require the motion of the subject to be necessarily generative. Instead, it permits the subject to maintain its identity and stability throughout its process of motion. Significantly, these two Flux theories apply to different interpretations of Protagorean epistemology. Bostock expounds that there are two possible ways to understand Protagoras' infallibilism of private experience. One way, he claims, is the "solution by relativity". Namely, "there is some one object, the wind, which you and I are both judging about, but what each of us is

judging about it is how that same wind is related to himself. So I am concerned with how the wind is related to me, and you are concerned with how it is related to you, and that is why our judgments are not really in conflict after all." And the other way is called as "solution by private objects", which evinces that "the judgments are not really about the same object: my judgment concerns the wind-as-it-is-for-me, and this object genuinely is hot, but your judgment concerns the-wind-as-it-is-to-you, which genuinely is cold. On this approach, there simply is not such a thing as the wind itself".[161] If our reading is tenable, the 'solution by relativity' precisely aligns with the Protagorean epistemology anchored in the primary Heracltiean flux discussed earlier, whereas the 'solution by private objects' correctly interprets the mechanism of the Protagorean epistemology delineated here. Again, it is because of Theaetetus' failing to catch Socrates' interpretation of the Protagorean epistemology based on the primary Heraclitean flux that Socrates turns to reconstruct the foundation of the stricter Heraclitean flux and finally leads to a fresh understanding of Protagorean epistemology (155c-e).

In the meantime, it is imperative not to hastily determine whether Plato himself regards this stricter and extremer Heraclitean flux as a precise paraphrase of the historical Pre-Socratic philosopher's idea. But we should notice that notably he never cites any literal material or fragment of Heraclitus or other philosophers when discussing this stricter version of Heraclitean Flux. Central to this segment of text is Plato's endeavour to show how far the Heraclitean flux can bolster Protagoras' epistemology—irrespective of whether it is advocated by those Pre-Socratic philosophers themselves or not.

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[161] Bostock, 1988: 47-48.

And, upon further analysis, this stricter flux obviously recalls the assertion put forth by Diotima in the *Symposium*. In that dialogue, Diotima claims that mortal things are always changing generatively, and each of them is just said to be one thing but actually a series of substantially different things. The stricter Heracltiean flux here aligns metaphysically with Diotima's articulation, asserting the constant flux and generative essence of changes.[162] And in the subsequent section, we will explore how Socrates' following reflections on the Heraclitean flux also undermine his first model of change and motion.

(3) Conventionalism as the Political Flux

As a famous professional sophist, the historical Protagoras explicitly cannot be satisfied with merely constructing subtle epistemological models. Instead, these Heraclitean Flux theories do extend beyond the confines of epistemology. Socrates reveals what really concerns him and his followers—namely, the ethical and political issues.

After elaborating on the stricter Heraclitean Flux and the corresponding Protagorean epistemology, Socrates promptly underscores the potential extreme consequences and deductions of this theory (161c-165e).[163] For instance, if Protagoras' Man-Measure doctrine holds true, then Protagoras' opinion is not truer and more defensible than any other's. Consequently,

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[162] Though this stricter Heraclitean flux surprisingly bears resemblance to the one in Plato's first model of change and motion in this aspect, it should not be neglected that there is an essential difference between them. In Plato's first model, the subject undergoes the generative change because of participating the Forms, while here the cause of generative change is believed to be the passive subjects' physical interaction with the active object.

[163] A summary of these criticisms, cf. Sedley, 2004: 54-55.

his words are not trustworthy and he does not possess greater wisdom than anyone else (161d-162a). And besides, under Protagoras' theory, one would have to concede that we both see and not see the same thing when one of our eyes is covered (165b-c). Although these criticisms are always thought to be failed and ridiculous,[164] they successfully force Protagoras (in the tongue of Socrates) to dodge by replying in an ambiguous way (166a-c). Protagoras it thus compelled to recapitulate the central idea of his theory and challenges Socrates to a more direct refutation. He argues,

> "I take my stand on the truth being as I have written it. Each one of us is the measure both of what is and of what is not; but there are countless differences between men for just this very reason, that different things both are and appear to be to different subjects. I certainly do not deny the existence of both wisdom and wise men: far from it. But the man whom I call wise is the man who can change the appearances—the man who in any case where bad things both appear and are for one of us, works a change and makes good things appear and be for him…In education, too, what we have to do is to change a worse state into a better state; only whereas the doctor brings about the change by the use of drugs, the professional teacher [i.e. the sophist] does it by the use of words…Whatever in any city is regarded as just and admirable is just and admirable, in that city and for so long as that convention maintains itself; but the wise man replaces each pernicious convention by a wholesome one, making this both be and seem just." (166c9-167c4)

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[164] Burnyeat, 1990: 21-22; also cf. Lee, E. N., 1973: 225; 255-256.

Thus, the ontology of flux, alongside the epistemology of perception, is proved to have applicability in the political field as well, although this demonstration is built on the questionable analogy between sensible perception and political belief. Given the Heraclitean flux, every sensible thing is not *F* in itself but only becomes *F* when it confronts something else. In the process of perceiving, for instance, the eye only becomes the seeing eye and the stone only comes to be the white stone privately at the moment when the eye sees the stone. The stone appears to be white and then is white for this eye. Here Protagoras asserts that the political belief operates similarly. Though it is hardly conceivable that something is able to have any physical interaction with the political objects like the polis, Protagoras insists that what appears just and valuable for the polis is really just and valuable for the latter. Then obviously, this opinion must rely on a sort of political flux wherein nothing is innately and inherently just and valuable—there even does not exist the justice or the valuableness *per se*.[165] As a result, the same thing may be equally perceived as just by one individual and unjust by another, grounded solely in personal feelings and beliefs—undoubtedly a standard conventionalism.

Plato clearly discerns the essence of this political conventionalism. Socrates points out that according to this theory, the political virtues or properties—such as the just and unjust, pious and impious—do not possess any being (*ousia*) by their nature (*phusei*). On the contrary, "what seems to people collectively to be so is true." And this idea resonates with

[165] Concerning the relationship between Heraclitean flux and the Protagorean theory, also cf. 177c-d.

many, even those not wholly aligned with Protagoras' theory (172b). Therefore, the practical implications of the Heraclitean Flux in the real political world are profound, prompting Socrates to delve deeply into the following text, even if being a digression it diverts from the original argument of the interlocutors about the infallibilism of perception (177b-c).

Now we have sufficiently seen that Plato elaborates a two versions of Heraclitean flux. The primary Heraclitean flux, as we said, is less radical by mainly acquiring everything to be the offspring of motions and thereby more or less permitting the stability of subjects or objects amidst change. Thus it objectively aligns more closely with the views of historical pre-Socratic philosophers. This edition of flux, indeed, is hardly exhibited in Plato's previous dialogues. Conversely, the stricter Heraclitean flux, which we are more familiar with, emphasizes the universality of flux and the generative essence of change. And indeed, Plato's own view of the sensible things in the first model aligns with this stricter Heraclitean flux, highlighting the ceaseless and generative change of sensible things. At the same time, Socrates also investigates the conventionalism produced by introducing the Heraclitean flux into the political and practical fields—undoubtedly, a move he deems catastrophic.

1.2 Reflections of the Heraclitean Flux Theories

The detrimental impact of this political conventionalism, rooted in the Flux doctrine, is illuminated in the renowned digression of the *Theaetetus*. Within this section, Socrates delineates two distinct character types. The philosophers, exemplified by figures like Thales, are dedicated to

focusing on investigating "the entire nature of each whole among the things that are" (174a) and attain a state described as "the divine and supremely happy" (176e). In contrast, there are those who, failing to recognize and pursue those eternal beings, are preoccupied with "what lies near at hand" (174a). Socrates suggests that these individuals remain oblivious to the eternal and immortal things such as justice and injustice themselves, but miserably fall into the trivial and conventional topics—for example, the specific just or unjust behaviours (175c). These people, whom Socrates suggests are proponents of political conventionalism, may obsess about "the scrambling of political cliques for office; social functions, dinners, parties with flute-girls" (173d). And eventually, concerning their poor souls, Socrates incisively describes them as,

> "Such conditions make him keen and highly strung, skilled in flattering the master and working his way into favor; but cause his soul to be small and warped. His early servitude prevents him from making a free, straight growth; it forces him into doing crooked things by imposing dangers and alarms upon a soul that is still tender. He cannot meet these by just and honest practice, and so resorts to lies and to the policy of repaying one wrong with another…" (173a1-9)

Socrates unequivocally contends that political conventionalism will engender wretched and slavish souls (172d; 172e; 175e-176a). This is also confirmed by a similar argument in the *Republic*. In Book IX, Socrates argues that the soul which is fulfilled with the true beings is more like to enjoy genuine pleasure, while those who do not pursue the

real beings, “they feed, fatten, and fornicate. To outdo others in these things, they kick and butt them with iron horns and hooves, killing each other, because their desires are insatiable.” (*Rep.* 585d-586b) Plato here clearly asserts that the desires, stemming from a lack of knowledge and pursuit of real beings, can catalyze both personal unhappiness and broader political disasters. Although here Plato does not directly talk about the relationship between the pursuit of the soul and the reality of politics, his stance does not seem to deviate from the one articulated in the *Republic*.

The political results of Protagoras’ conventionalism are clearly one of the major things that concern Plato, which is the background of his whole argument and he means to extend the discussion from epistemology to political affairs (*Theaet.* 167c; 168b; 172a-b; 177c-e; 179a).[166] Through Socrates’ argument in the digression, the pitfalls of this conventionalism in political and ethical dimensions become highly discernible. But how about the flux theory which is the ontological foundation of this conventionalism? Which one(s) of these flux theories do Plato repudiate and criticize? And does Plato endorse any one of these flux theories? Furthermore, do these criticisms reveal any reflection of the flux theory in his first model of change and motion? Our examination will proceed in two phases. First, (1) we will elucidate how Socrates underscores that the Protagorean epistemology, anchored in the stricter Heraclitean flux, is somehow self-refuted. This criticism, however, seems not only to impugn

[166] Cornford claims that Protagoras himself may not go so far as the conventionalism does in the digression. And this extreme position is the same as the one formulated in the *Republic* by Thrasymachus. Cornford, 1935: 82. Sedley, further, believes that the digression is midwife of the political theory which Plato elaborated in the *Republic*. Sedley, 2004: 70-76. Also cf. Sedley, 2010.

the Heraclitean flux but also Plato's own understanding of motion and change in his first model (179d-183c). And then, (2) the final argument (184b-186e) suggests a reflection of the scope of Being, which potentially undermines Plato's own metaphysics of change theory presented in his previous dialogues.

(1) Arguments against the Heraclitean Flux Theory

In order to disprove the infallibility of the individual's private experience, Socrates turns to examine the flux theory proposed by Heraclitus and his proponents, which is claimed to be the underpinning of the Protagorean Man-Measure Doctrine (179d-181b). This refutation includes two steps. First, Socrates claims that there are two forms of motion (*kinesis*), namely alteration (*alloiōsis*) and spatial motion (*phora*) (181d). And he further posits that if we agree with the Heraclitean Flux that everything is in motion (*kinesis*), we must hold that it must concurrently move in both ways. Otherwise, "it will turn out that, in their view, things are both moving and standing still; and it will be no more correct to say that all things are in motion than to say that all things stand still." (181e5-7) Therefore, to state that all things are always in motion equates to suggesting that "all things are always in every kind of motion" (182a1-2). Second, if all things are both incessantly moving and changing at the same time, it becomes untenable to correctly ascribe any property to them, for the thing in such an extreme flux always quietly slips away when it is spoken (182c-d). And no perception can remain but they are also in motion (182d-e). Because if a perception—say, seeing—were to remain constant, even momentarily, it would come to a standstill. Therefore, as Socrates says, "we may not call anything seeing rather than not-seeing; nor indeed may we call it any other perception rather than not—if it be

admitted that all things are in motion in every way" (182e4-6). If so, we will never be more correct to say 'it is thus' according to our perception than 'it is not thus' (183a). The only appropriate description might be "not at all thus" (οὐδ' οὕτως, 183b4).[167] Then, perception is not knowledge.

How is the Protagorean epistemology disproved in this argument? And relating to what mainly concerns us, what role does the Heraclitean flux theory play here? Does Plato convey his own stance on flux? The traditional view tends to believe that this argument includes some constructive discussions of change. Cornford, for instance, advocates that while Plato acknowledges the flux as a valid description of the empirical world, the shortcoming and failure of Protagoras' theory underscores the necessity for Platonic Forms which are stable and immune to flux. He says, "The conclusion Plato means us to draw is this: unless we recognize some class of knowable entities exempt from the Heracleitean flux and so capable of standing as the fixed meanings of words, no definition of knowledge can be any more true than its contradictory."[168] McDowell holds a similar view.[169] On the contrary, Burnyeat, as the *de facto* founder of the new *reductio ad absurdum* reading, denies that Plato reveals any of his own thinking about change in this refutation. In Burnyeat's analysis, this argument merely demonstrates the logical self-refutation of the three-in-one theory—that is, Theaetetus' definition, Heraclitus' flux and Protagoras' Man-Measure Doctrine. Namely, in order

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[167] The manuscripts diverge from each other about this phrase. Different readings include: οὐδ' οὕτως (W), "not at all thus", which is followed by OCT, McDowell and Levett & Burnyeat; οὐδ' ὅπως (BT), "no how", which is accepted by Campbell, Jowett; Cornford rejects both readings and suggests οὐδ' οὐδέπως, "not even no-how".
[168] Cornford, 1935: 99.
[169] McDowell, 1973: 183-184.

to guarantee Protagoras' infallibilism of private experience, one has to admit that everything is moving and changing in an extreme way. And it inevitably leads to the impossibility of language as a necessary cost, which is obviously absurd. Therefore, Burnyeat contends that in this argument Socrates' intention is not to promulgate his own theory of change and motion but rather to highlight the fatal flaw of Protagoras' theory rooted in the Heraclitean flux. Plato's own thought will emerge later in the final argument (184b-186e) which notably omits any reference motion.[170]

Both of these opposing readings are reasonable in some respects. Yet, neither of them furnishes a comprehensive understanding of Plato's idea of flux presented in this text. Crucially, they both seem to overlook the fact that we have sufficiently shown that there are multiple versions of Heraclitean flux within this dialogue. These two types of flux, indeed, reveal Plato's complicated reflections on Heraclitean flux theory. Our inclination is that here Socrates provides a twofold reflection. On the one hand, as Burnyeat suggests, in this text Socrates delivers a direct, self-refuting argument against Protagoras' theory rooted in Heraclitean flux, and proves that authentic knowledge cannot spring from such a base. On the other hand, when viewing this argument in a broader context, Socrates does articulate his own critical thinking concerning Heraclitus' flux which actually challenges his previous doctrine of motion.

Let us elucidate this in more detail. First, at the direct and literal level of this argument, Burnyeat's opinion is somehow reasonable, interpreting it as a self-refutation of the Protagorean epistemology which is based on

[170] Burnyeat, 1990. Also cf. Polansky, 1992: 153-154.

some kind of Heraclitean flux. According to the Heraclitean flux, everything has to undergo all sorts of motions ceaselessly which eliminates all stability. And the Protagorean epistemology requires the flux theory to guarantee the infallibility of perception. However, if things change in such an extreme way, asserting '*x* becomes *F* for *a* at time *t*' is no more correct than saying '*x* does not become *F* for *a* at time *t*'. Therefore, this extreme Heraclitean flux inherently sabotages the possibility of the infallibility of perception. And hence, we are not able to correctly make any judgement. Just as Burnyeat comments, "the price to be paid for making perceptual judgements totally incorrigible is that they then have nothing to say to us".[171]

This aptly captures how Protagoras' epistemological theory is disproved. But this reading does not exhaust Socrates' entire agenda here. Burnyeat's *reductio* interpretation, though incisive, has two shortcomings: (1) It predominantly critiques the support this extreme flux theory lends to Protagoras' epistemology rather than addressing the Heraclitean flux doctrine *per se*. Burnyeat even does not think that the extreme flux here necessarily belongs to any real member of the historical group of Heraclitus and his followers. Instead, he believes that this text, as a reduction argument, mainly "offers a reason why a Heraclitean would be committed to accepting further elements of change into the theory of perception" and thus this extreme flux is only "reached by argument".[172] Yet, the text suggests Plato's intention is not merely to counter Protagorean doctrine, but also to challenge Heraclitean flux theory itself as well. Socrates explicitly asserts that he is examining Heraclitus' and

[171] Burnyeat, 1990: 46. Other possible readings of this argument, cf. Chappell, 2004: 137-140.
[172] Burnyeat, 1990: 47.

his followers' idea of flux (179d-180d; 181a), which clearly indicates that Socrates seriously aims at criticizing Heraclitean flux directly. And the impossibility of language, though fatal for Protagorean epistemology, may not be an outrageous description of Heraclitus and his adherents. In the text, the character Socrates attributes to them that they are unable to say any explicit and definitive words (179d-180b) recalls us of Aristotle's famous report of Cratylus—"who finally did not think it right to say anything but only moved his finger" (*Metaph*. 1010a12). Thus, the reduction argument is not Socrates' refutation of Heraclitean flux, and he must deal with the latter in another way. And further, (2) Burnyeat posits that this argument lacks Plato's own insight of motion, contending that this reduction argument is a deduction of Protagoras' doctrine. He says that "its starting point is not some alien Platonic premise they need not bother with, but a careful analysis and elaboration of their own initial conviction that the senses provide us with knowledge and certainty."[173] But given that the flux which Plato himself holds in the first model—as we have already argued—shares some foundational essence with the stricter Heraclitean Flux, if the flux refuted here is closely related to the stricter Heraclitean flux, it hardly denies that what Socrates argues about flux in this text is also tied to his own thought of flux. And then the weakness that attaches to this flux can also be found in Plato's first model of change and motion. So, Socrates' critique of the extreme Heraclitean flux actually involves Plato's own reflection of his first model.

Plato's deeper and implicit reflection on flux, then, emerges if the text is read within the broader context of Platonic dialogues. Contrasting with Burnyeat's reading which remains tethered in the literal interpretation of

[173] Burnyeat, 1990: 47.

this singular text, Cornford and other proponents of the traditional reading prioritize Socrates' criticism of the Heraclitean flux itself beyond its failed support for Protagorean doctrine. As noted earlier, Cornford claims that from Plato's perspective, this Heraclitean flux aptly characterizes the sensible realm but lacks grasping of the stable Form. Therefore, Plato's underlying philosophy in this text is coherent with the position taken in the middle dialogues. Besides, some scholars, such as Bolton, propose that this refutation hints at a kind of moderate Heraclitean Flux that Plato tacitly endorses. Bolton contends that while this moderate flux permits objects to remain over time while moving through space and changing some of their characteristics, the extreme flux disallows any consistent characteristics over time and is thus refused by Plato.[174] In parallel, some scholars claim that Plato subscribes to the belief that objects always undergo changes in *some* respects, while he rejects the idea of constant change in *all* respects.[175] These moderate flux theories, they believe, prevent Plato from becoming mired in the linguistic morass of "not at all thus". As Burnyeat correctly summarizes, according to this sort of view, "[t]he absurdity will demonstrate where limits must be imposed on the Heraclitean flux of becoming; within these limits, the earlier theory of perception can stand unimpaired, a firm Platonic basis for the proof that perception is not knowledge."[176]

Nevertheless, such a sort of traditional reading is not wholly defensible. Like Burnyeat's reduction reading, it also neglects the multiplicity of Heraclitean Flux versions Socrates elaborates upon in the *Theaetetus*. They may not precisely delineate the essence of Plato's dissatisfaction. A

[174] Bolton, 1975: 75.
[175] Cf. Bostock, 1988: 109.
[176] Burnyeat, 1990: 46.

closer analysis of which specific flux Socrates challenges and his method of refutation reveals that Plato does not repeat what he repeatedly argued in the middle dialogues, but rather implicitly suggests a serious reflection of it.

Let us be more specific. It has been firmly established that compared with the primary Heraclitean flux that everything comes to be from change and motion, the stricter Heraclitean flux doctrine that everything is nothing but motion from the previous possesses two critical characters. On the one hand, it deprives everything of any stability; and on the other hand, all changes are generative, for nothing retains its identity during its changes. These two deceived characters also appear in Socrates' refutation of Heraclitean flux.

When introducing the primary Heraclitean flux, Socrates characterizes it as "nothing ever is, but everything is coming to be" and cites Homer's verse "Ocean, better of gods, and Tethys their mother". Through this, Socrates underscores that according to this version of flux, all things are the offspring of flux and motion (152e). However, at the onset of this refutation, Socrates revisits Homer's verse but refrains from equating it to "everything is the offspring of motion" as in his prior elucidation of the primary Heraclitean flux. Instead, he says, "that Ocean and Tethys, the origin of all things, are actually flowing streams, and nothing stands still…even shoemakers may hear and assimilate their wisdom, and give up the silly idea that somethings in this world stand still while others move, learn that all things are in motion" (*Theaet*. 180d1-7). Indeed, during the refutation Socrates highlights that the Heraclitean flux requires the removal of any standstill. Entities must undergo both locomotion and

alteration ceaselessly concurrently, otherwise the proposition "all things are in motion" would not be satisfied (181e-182a; 182d-e). As Theodorus describes, "if, being in flux, it is always quietly slipping away as you speak" (182d7). This is not what the primary Heraclitean flux mainly argues, for it even allows some sort of stability of the subjects. On the contrary, the stricter Heraclitean flux is more closely aligned with the one discussed in the refutation, in which Socrates emphasizes that "everything is really motion, and there is nothing but motion" (156a), negating any terminology that instills stability such as "'something', 'of something', or 'mine', 'this' or 'that', or any other name that makes things stand still" (157b). Concerning this aspect, the flux in question even goes one more step by being more radically flowing than the stricter Heraclitean flux. As Bostock rightly points out the stricter Heraclitean flux, though announcing that everything is in motion, does not require entities to undergo locomotion and alteration at the same time.[177] Now in this refutation, Socrates demands the flux to obey the principle of the stricter Heraclitean flux more radically and strictly to eradicate any stability. Therefore, in the refutation, Socrates scrutinizes a radical version of the stricter Heraclitean flux, grounded in the principle that "everything is in motion".

At the same time, this radical flux also concurs with the stricter Heraclitean Flux in the aspect that things are always in generation by becoming something completely new. This becomes apparent as Socrates delves into Heraclitus' theory attempting to radicalize the flux by deducing that everything should be always in all kinds of change

[177] Bostock, 1988: 107-109.

(181c-182a). Specifically, this argument could be divided into the following steps:

(I) Heraclitus and his followers: “all things are in motion” (181c);

(II) Socrates: Motion has two kinds—namely, one thing can move in two aspects, spatial motion (*phora*) and alteration (*alloiōsis*) (181c-d);

(III) Socrates: Everything is in motion in both ways, otherwise it would be standing still in some aspects which conflicts with (I) (181d-e);

(IV) Conclusion: All things are always in every kind of motion (182a).

It is clear that (III) is the most pivotal step. And it is undoubtedly built on the logical foundation that it is self-contradictory if “things are both moving and standing sill” (181e). Namely, motion is inherently incompatible with rest. Accordingly, if something moves, then it cannot be stable in any aspect. This moving thing, hence, is unable to retain the same with itself, since to remain identity is explicitly to keep stable. This leads to the evident deduction that things are always undergoing generative changes. It is thus logical to assert that this refutation adheres stringently to the stricter Heraclitean Flux concerning the generative nature of change in the strictest sense. Additionally, (III) also suggests that this generative character is more fundamental than the ever-moving in this refutation. For based on his reasoning, it is because of this incompatibility of motion and rest that necessitates what moves to change in all aspects.

Therefore, the flux theory refuted here is an extreme and radical edition of the stricter Heraclitean flux rigorously adhering to its stipulation that

all things are incessantly in motion and moving generatively. Since this flux is soon proved to be absurd, Socrates highlights a fundamental flaw in the stricter Heraclitean flux that it would be too flowing to be spoken about.

Consequently, compared with the primary Heraclitean flux, the stricter Heraclitean flux is what Plato seeks to criticize in this argument. Especially, he suggests that the critical characters of the stricter Heraclitean flux—ever-moving and generative characters—are the fundamental weak points of this doctrine. And naturally, any theory grounded in the same foundation with the stricter Heraclitean flux is logically and potentially susceptible to the same challenge.

This flux theory, undoubtedly, resonates with Plato's own thinking about change in his middle dialogues, for there he argues that everything is always in motion and all changes are generative. In the *Cratylus*, Plato introduces a flux theory akin to the stricter Heraclitean flux. Socrates cites Heraclitus' river fragments that "everything gives way and nothing stands fast" and "you cannot step into the same river twice" (*Crat.* 402a). And he also asserts that we are unable to say something "first that it is this and then that it is such and such" because at the moment we are speaking, the subject is "inevitably and immediately becoming a different thing and altering and no longer being as it was" (*Crat.* 439d). This expression explicitly matches with the stricter flux examined in the refutation. And though Plato may not show his own stance on the flux of the sensible things in the *Cratylus*, in the *Symposium*, Diotima posits without any doubt that all things are always being renewed and never consist of the same things (*Smp*. 207c-208b). Similarly, in the *Phaedo*,

Socrates also characterizes sensible things as something always varying from one time to another and never being the same both in relation to themselves and to each other (*Phd*. 78c-e).

Therefore, Plato's first model of change and motion hardly avoids Socrates' refutation in the *Theaetetus*, for it shares the same foundation with the stricter Heraclitean flux concerning the change of sensible things. Although Plato does not fully align with Heraclitus and others in asserting that genuine knowledge pertains to the flowing entities, he nevertheless also faces the difficulty that we are unable to efficiently name the ever-changing sensible things—also establishing opinions about them would be impossible. This result, importantly, clearly creates tremendous tension with Plato's epistemology in the *Republic* where opinions hold legitimacy to some extent. Thus, contrary to the traditional interpretations suggesting that Plato's refutation of Heraclitean Flux in the *Theaetetus* alludes to a moderate Flux with he might endorse, we posit that Plato's actual intent in this text is to highlight the potential flaw and his corresponding criticism of the motion theory presented in earlier dialogues. Kahn also advocates that the flux theory in this refutation parallels the flux in the *Cratylus*, and suggests that Plato here distances himself from, rather than embraces, this flux doctrine as a representation of the sensible world.[178]

One might question whether the flux theory Socrates refuted in the *Theaetetus* matches Plato's interpretation of motion and change in his first model, since Plato's first model does not appear to mandate perpetual change in all aspects—it even permits non-generative motions. However,

[178] Kahn, 2014: 55.

as previously discussed, the flux refuted in this argument is an extreme deduction from the stricter Heraclitean Flux, sternly meeting its criteria for ceaseless and generative motions. And if these principles are strictly obeyed, nothing can be said any more. Plato's first model also satisfies these criteria, so it clearly faces this potent critique.

In sum, here Socrates provides a twofold critique. On the one hand, as Burnyeat rightly points out, the Heraclitean flux cannot buttress Protagoras' epistemology. On the other hand, Plato seems to hint that his own interpretation of flux in the first model, being aligned with the ceaseless and generative characters of the stricter Heraclitean flux, also faces the puzzle of "impossibility of language". Currently, Plato seems to refrain from positing any definitive solution. He does not allude to any restricted flux of the sensible. The ontological resolution will be suggested in the *Sophist*, and a physical one expounded upon in the *Timaeus*.

(2) "The Common Term"

Socrates further provides the final argument directly against the Protagorean definition that perception is knowledge. Notably, this argument relies on a fresh concept: the "common term" (*to koinon*). The "common term", as we will discuss, poses a potential challenge to the foundation of Plato's first model in another way.

Socrates argues that with the soul, we perceive all that is perceptible through the body as instruments—for example, the eyes and ears (184d-e). And then, what is perceived through one power cannot be perceived through another. Such as, we cannot see through the power of hearing,

and vice versa (184e-185a). And the what-is of a sound and a colour, as well as "the same", "the different", "one" and "two", "the like" and "the unlike", termed as common terms (*to koinon*), are perceived by soul through the soul itself rather than through the power of hearing or seeing (185a-e). Further, only by getting at what-is can we get at the truth and then acquire knowledge (186c). So knowledge cannot be found in perceptual experiences but only in the reasoning about them. Perception is thus proved not to be knowledge (186d-e).

What then is this critical 'common term"? Cornford declares that the common term is identical with the Form. Acquiring knowledge, then, is to grasp these changeless common terms.[179] Conversely, Burnyeat and some other scholars avoid equating the common term with the Form. In their interpretation, the reason perception fails to get at being is merely that it cannot make any proposition without the help of the soul to make the use of 'is'.[180] Indeed, although Plato never uses the term 'Form' in the *Theaetetus*, the close connection between Form and the common term can hardly be denied. As Chappell highlights, the common term outlined in the *Theaetetus* bears notable resemblance to the lists of Forms in other dialogues. For instance, in the *Parmenides*, the Forms similarly encompass likeness and unlikeness, multitude and oneness, rest and motion (*Prm*. 129d-e). And in the *Sophist*, being, sameness, otherness, rest and change also appear as the 'greatest kinds' (*Sph.* 254b-258e).[181] Hence, even if the 'common term' is not synonymous with 'Form', it must be closely related to it.

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[179] Cornford, 1935: 102-109. Similar, Chappell, 2004: 146-149.
[180] Burnyeat, 1990: 59-60; Bostock, 1988: 125. And also cf. Moss, 2021: 226-227.
[181] Chappell, 2004: 147.

But it does not imply that there is no difference between the 'common term' and the Form in Plato's middle dialogues. As McDowell astutely observes, the perceptual Form is excluded by the mechanism of a common term.[182] For in this argument, Socrates explicitly emphasizes that only the "common term" constitutes knowledge. And he makes an explicit comparison between the alleged "common term" and perception. What we perceive are "some things which all creatures, men and animals alike, are naturally able to perceive as soon as they are born; I mean, the experiences which reach the soul through the body" (186b-c). And each perception can be perceived by only one organ (185a). For instance, black and white can only be seen by eyes, while the sound exclusively by ears. In contrast, the "common term", which the soul investigates through itself, is the "being" (*ousia*) common to sight, hearing and all other perceptions (185b; 185e; 186a). As such, the "common term" refers not to the perceptions but their "the fact that they are, their opposition to one another, and the being, again, of this opposition" (186b). Hence, the scope of "common term" is more constrained than the Forms in Plato's middle dialogues. According to the *Phaedo*, *Republic* and other middle dialogues, there always exists a Form *F*-ness corresponding to each property *F*, like Hotness, Hardness, Lightness, etc. Yet, the "common term" does not encompass these sensible Forms, since the sensible Forms are clearly not universally applicable to multiple perceptions. Consequently, if the "common term" of the *Theaetetus* represents Plato's new understanding of Form, then the scope of Form is seriously restricted compared to the middle dialogues.

[182] McDowell, 1973: 189.

Furthermore, this shift potentially undermines Plato's first model of change and motion. Because the mechanism of change in this model presupposes that each property *F* has a corresponding Form *F*-ness. And it is the *F*-ness that results in the generative change of an entity when it becomes *F*. But now, the "common term", according to its definition, excludes the sensible Forms, making it insufficient to account for all changes any longer. This mechanism of generative change, hence, is not of validity in the meantime.

It is, therefore, reasonable to assert that the *Theaetetus* offers two pivotal considerations of Plato's previous thinking of change and motion. On the one hand, the refutation of the stricter Heraclitean flux suggests the potential difficulty in the notion of the sensible always undergoing generative changes. On the other hand, the theory of the 'common term' undermines his first model of change and motion, compelling him to explore a new mechanism of change. The *Theaetetus* marks the onset of Plato's ambitious project to thoroughly reflect his previous theory, which will culminate in the revelation that the Parmenidean principle indeed undermines Plato's first model. In this dialogue, Socrates announces his intention to scrutinize both the fluent fellow and the school of Parmenides, and to discern which aligns closer to the truth (181a-b). He promptly dismisses the former, referencing the aforementioned self-refutation of Heraclitean flux. Then Socrates immediately interrupts this plan and keeps Parmenides' theory unrevealed, because "Parmenides seems to me, in the words of Homer, to be 'reverend' and 'awful'. I met him when I was very young and he was a very old man; and he seemed to me to have a wholly noble depth. So I am afraid we might not understand even what he says; still less should we attain to his real thought." (183e-184a) This

in fact suggests Socrates' inclination towards Parmenidean thought. The examination of the Parmenidean school subsequently unfolds in the *Parmenides*, a conversation between Parmenides and the young Socrates. As we will discuss in the ensuing section, this dialogue underscores the inexistence of so-called non-generative motion, arguing that all motions are inherently generative, just as Socrates' premise represented in the stricter Heraclitean flux. Moreover, as we will discuss, in the *Sophist*, which is designed to happen on the next day of the meeting of the *Theaetetus*, Plato further clarifies that Parmenides' theory of What-is, as the foundation of Plato's first model, is problematic. And in the examine of the *Sophist*, the incompatibility of motion and rest—which as we have argued is also the ontological premise of Socrates' refutation of Heraclitean Flux in the *Theaetetus*—plays a very important role and is one of the main targets for the interlocutors to overcome.

2. Further Reflections in the *Parmenides*

As we have seen, in the *Theaetetus*, Socrates mentions a meeting with Parmenides when he was young, noting the profound depth of Parmenides' wisdom. So he refrains from discussing Parmenides' theory to prevent lamentable misunderstandings (*Theaet.* 183e-184a). Nevertheless, the meeting as well as the theory of Parmenides and his followers are immediately uncovered in the *Parmenides*. It is widely held that the young Socrates in the *Parmenides* portrays a theory of Form advocated in Plato's middle dialogues, and this theory undergoes thorough scrutiny in this work. Given that Plato's first model of change and motion intrinsically relies on the middle theory of Form, the critiques of this theory consequently lead to potential and direct difficulties of Plato's previous theory of change and motion.

After listening to Zeno's poem, the young Socrates summarizes its leitmotiv as "if things are many, they must then be both like and unlike, but that is impossible, because unlike things can't be like or like things unlike" and so it is impossible for unlike things to be like and like things unlike, then it is impossible for them to be many, otherwise they would have incompatible properties (*Prm.* 127e). By this logic, if the things were many, they had to be both *F* and not-*F*, undoubtedly contravening the law of non-contradiction, and hence it is apparently ridiculous. Obviously, this idea is basically in accord with the Eleatic principle of What-is previously discussed that What-is must be and cannot not be. Yet, the young Socrates is not completely satisfied with this doctrine. In his view, this principle is precisely apt for the Forms, but not for the sensible. He says,

> "[D]on't you acknowledge that there is a Form, itself by itself, of likeness, and another form, opposite to this, which is what unlike is? Don't you and I and the other things we call 'many' get a share of those two entities? And don't things that get a share of likeness come to be like in that way and to the extent that they get a share, whereas things that get a share of unlikeness come to be unlike, and things that get a share of both come to be both? And even if all things get a share of both, though they are opposites, and by partaking of them are both like and unlike themselves, what's astonishing about that? If someone showed that the likes themselves come to be unlike or the unlike like—that, I think, would be a marvel; but if he shows that things that partake of both of these have both

> properties, there seems to me nothing strange about that…But if he should demonstrate this thing itself, what one is, to be many, or, conversely, the many to be one—at this I'll be astonished." (128e6-129c1).

This is young Socrates' reply to Zeno's puzzle, explicitly illuminating how Plato's philoshophy presented in his middle works developed from the Parmenidean theory. In this reply, he agrees with Zeno that the Form or the thing itself cannot possess opposite properties by being both *F* and not-*F*. But diverging from Zeno, young Socrates advocates that the other things (namely, the sensible) can be *F* and not-*F* with no difficulty. Needless to repeat, sensible things are able to receive opposite properties through change—no matter in relation to themselves or to others. This view of young Socrates precisely mirrors the emphasis placed by the old Socrates, prior to his death in the *Phaedo*, on the idea that the sensible things are always coming from the opposite, while the opposite itself could never become opposite to itself (*Phd.* 103b). And further, in line with what is argued in the *Phaedo* and Plato's first model of change and motion, here young Socrates also views Form as the cause of change. A sensible thing comes to be *F* by participating in the corresponding Form *F*-ness, and comes to be not-*F* by the opposite Form. The notion of Form in pairs, as we have seen, is the core of the mechanism of change in Plato's first model.

Therefore, in this dialogue, Plato succinctly encapsulates his middle theory's response to the Eleatics. Young Socrates, representing the middle Platonic theory, admits the logical efficiency of the Parmenidean principle to some extent that What-is always is and cannot possess

opposite properties. But he does not concede its ontological result held by Zeno and Parmenides that all is one and 'many' is absurd (*Prm*. 128a-e). For these Eleatic philosophers, this sensible world, which is full of multitude and variety, is merely illusory. Conversely, young Socrates—also, the middle Platonic theory—admits the existence of a flowing and variable world. It suggests that this Parmenidean view should be confined to the Forms as the real beings, while the sensible things can legitimately be both *F* and not-*F* by participating in the opposite Forms. As discussed earlier, sensible things are not real beings and they are naturally self-contradicted due to their constant oscillation between the opposites. These changes are generative, caused by the participations of Forms. These entities, when coming to be *F* and not-*F* generatively, do not possess these properties internally and permanently.

However, this subtle solution is promptly challenged by Zeno and Parmenides in this dialogue, signalling systematical critiques of the Platonic middle theory of Form. Inevitably, this leads to a deep examination of the first model. The potential and direct criticisms at least encompass: (1) The scope of Forms. The first model requires Forms in pairs to encompass all kinds of changes. However, the scope of Forms is proved to be questionable. (2) The participation puzzles. The mechanism of change in the first model relies on the participation of Forms, which is argued to be ambiguous in the text. (3) The classification and essence of motions. In the first model, all changes are the results of Forms and are thus generative, while the motions being irrelevant with Forms are non-generative. But this classification appears problematic in the *Parmenides* when the essence of motion and change is expounded upon. These points will be sequentially addressed.

2.1 The Scope of Forms

Parmenides then begins to challenge young Socrates' theory that each predicate or property is associated with a corresponding and separate Form (130a-b) by examining the scope of Forms. As noted in the previous section, Plato suggests that the sensible Forms should be excluded. Now he further rejects the negative Forms.

In this passage, Parmenides discusses three possible categories of Forms according to young Socrates' view. He first questions Socrates whether he accepts the existence of the Form Justice, Beauty and Goodness, etc. Socrates responds affirmatively. Therefore, the first category encompasses moral, political and aesthetic forms. Most scholars concur that these are undoubtedly the most prominent Forms discussed in Plato's middle dialogues, especially in the *Phaedo* and the *Republic*.[183] Then, Parmenides asks whether there also exist Forms of concrete things such as human beings, fire, and water. Thus, the second category is the Form of natural kinds. Forms of this category are also occasionally mentioned in Plato's other dialogues. In the *Timaeus*, for instance, the interlocutor mentions "Fire just in itself or any of the other things" which are clearly Forms of natural kinds (*Tim*. 51b). However, here young Socrates concedes that he often feels uncertainty regarding these Forms. He says, "I've often found myself in doubt whether I should talk about those in the same way as the others or differently." (*Prm.* 130c3-4) This attitude may imply that the middle Platonic philosophy is also ambivalent to the Form

[183] Such as, Cornford, 1939: 83; Gill, 1996: 21. But these Forms, strictly speaking, may not represent all kinds of Forms discussed in the middle dialogues. For in the *Parmenides*, these Forms may not exist in pairs as it is suggested by Socrates' rejection of the negative Forms, which we will soon discuss.

of natural kinds. Indeed, in the *Phaedo*, the fire is/becomes fire not because of the Form Fire but the Form Hotness (*Phd.* 103c-d), suggesting Plato's reluctance to introduce the Form of natural kinds in this phase.[184] Finally, Parmenides enumerates some undignified and worthless things—hair, mud, and dirt. And this time Socrates unequivocally denies the existence of their corresponding Forms, asserting "these things are in fact just what we see" (*Prm*. 130b-d). This last category, as young Socrates claims, troubles him from time to time and so he hurries away (130d). These things should have corresponding Forms according to young Socrates' principle of Form, but he still deems acknowledging such Forms as outlandish.[185]

So why does Socrates find it difficult to embrace the second and the third categories of Forms? Some scholars simply attribute this to young Socrates' immaturity and lack of philosophical training (130e), positing that he will eventually accept those Forms after adequate training and growth. This is how they interpret Parmenides' commentary on young Socrates' evasive attitude towards those Forms, "that's because you are still young…and philosophy has not yet gripped you as, in my, opinion, it will in the future, once you begin to consider none of the cases beneath your notice. Now, though, you still care about what people think, because of your youth." (130e)[186] However, this saying does not really confirm the existence of Forms for natural kinds and undignified things but only

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[184] Contra., Plato does talk about the Form of concrete things in some dialogues. Such as, *Meno*, 72b-c, Form of bee; *Cratylus*, 389d, Form of shuttle; *Rep*. 596b, Forms of bed and table.

[185] These three categories, indeed, do not cover all Forms which the interlocutors have already mentioned—such as, likeness and unlikeness, oneness and many, rest and motion, etc.

[186] Allen, 1997: 119-124. Also cf. Chen, 1982: 56

indicates Socrates might address this issue in the future. And if we accept that young Socrates' viewpoint mirrors Plato's theory of Form preseneted in his middle works, Parmenides' questions undeniably indicate the reflections on the scope of middle Platonic Forms.

Thus again, why cannot young Socrates, as well as the middle Platonic dialogues, recognize those two categories of Forms? Rickless offers us a possible alternative. He contends that this text reveals a tension between the principles of Self-Predication and Separation in the middle theory of Forms. The former principle requires every Form *F*-ness to possess the corresponding property *F*, so the Form Justice is just, Goodness is good, etc. And the latter, certainly, insists that Forms should be separate and numerically distinct from sensible things and are only grasped by reasoning (130a). Consequently, natural kinds and the undignified things cannot satisfy both principles at the same time. For if the Form Human Being is a human being and the Form Mud is muddy, then these two Forms must be sensible since it is difficult to conceive them as non-sensible.[187]

Though young Socrates' theory seems not to rely on the principle of Self-Predication—this principle is undoubtedly correct—and does not mention the latter in this text, Rickless' understanding is still plausible to a degree. This is because Parmenides, in this segment of the dialogue, appears to primarily focus on the issue of separation. Before delineating those three categories of Forms, he especially asks "have you yourself distinguished as **separate** (χωρίς)…certain forms themselves, and also as **separate** the things that partake of them? And do you think that likeness

[187] Rickless, 2007: 54-55; 2020.

itself is something, **separate** from the likeness we have?" (130b2-4) Then, he repeatedly questions whether the Form of human beings, or other natural kinds, or the undignified and worthless exists by **separating** from all sensible things (130b-c). And young Socrates' assertion that the undignified and worthless things "are in fact just what we see" (130d3-4) also suggests that they fail to have separated and imperceptible Forms. This assertion also implies that these things are not becoming human beings, natural elements or undignified and worthless by participating in the namesake Forms. And this is probably the reason young Socrates concedes that he is doubting whether to talk about the natural kinds "in the same way as the others or differently" (130c-d). Gill's interpretation may provide a clear picture. The middle Platonic Form is supposed to elucidate the compresence of opposite properties within sensible things. So the Forms are always in pairs. Yet the natural kinds and undignified things lack clear opposites, so they have no corresponding Forms.[188] This negates the necessity for a Form specifically for natural kinds. As we have seen in the *Phaedo*, fire comes to be fire because of the Form Hotness rather than a Form Fire, and it passes away not because of the Form Snow but because of Coldness.

However, these interpretations, though providing some insight, fail to elucidate why young Socrates is more opposed to the Forms for undignified and worthless things than to natural kinds. While he displays ambivalence toward the latter, he dismisses the former without any doubt. This suggests an underlying and additional reason behind his rejection of the third kind of Form. The reason might be found in a literal interpretation. According to young Socrates' intuition, there should not

[188] Gill, 1996: 22-23. Also cf. Coxon, 1999: 102.

exist any negative Form for the undignified and worthless things. It's hard to conceive that hair, mud, dirt and other similar things have their own separated Forms, not solely because they are concrete things rather than opposite properties, but also due to their undignified and worthless character. If such Forms were to exist, these Forms would be the reason for them to become so undignified and worthless. Considering that the Forms are self-predicative, so those negative Forms themselves would be undignified and worthless, which is ridiculous. An ideal Form should resemble the first category Form Justice, Beauty and Goodness which are so sublime that their existence is unwaveringly confirmed by Socrates. As a result, young Socrates asserts that "it is too outlandish to think there is a form for them [viz. the undignified and worthless]" (130d4-5). This could be verified by Plato's discussion of negative Forms in the middle dialogues. As cited at the end of the last chapter, Plato posits that the Forms are the son of Goodness (*Rep.* 508c), and hence they are unlikely to be negative and undignified. Notably, he does refrains from mentioning such negative Forms in the core books of the *Republic*.

If so, the negative Forms are highly suspicious, then the scope of Forms is significantly limited. Although in this part of the text Parmenides does not directly critique young Socrates' theory of change which undoubtedly symbolizes Plato's middle theory and his first model, the limitation imposed on Forms does critically challenge them. As we have argued, the mechanism of change in Plato's first model of change and motion relies on the Forms in pairs. Each change of becoming *F* is resulted by participating in a corresponding Form *F*-ness. However, without negative Forms, sensible things cannot come to possess negative properties through participation. Consequently, the mechanism of change, and by

extension the whole model of change and motion, is profoundly disrupted by the restriction of Forms suggested here.

2.2 The Participation Puzzles

Parmenides subsequently turns to challenging the participation theory, revealing its inherent contradictions. This once again casts double on the first model of change and motion is potentially threatened, given that participation is undoubtedly central to its mechanism of change.

He elucidates that the process of participation, known as 'one-over-many', can only be sound in one of the two ways: either (I) the sensible thing *x* comes to be *F* by participating in the namesake Form *F*-ness as a whole, or (II) it only shares a part of this Form (131a). Parmenides first delves into the first possibility where Form is one and the same while sensible things are many. But if so, during the participations, the one and same Form *F*-ness would be shared by many sensible things x_1, x_2, x_3, …, x_n. And in each of these sensible things, then, there has to be one Form *F*-ness, since the Form is shared as a whole. As a result, the Form *F*-ness "would be separate from itself" (131a-b). Namely, if Form is participated as a whole by various sensible things, it must be both one and many—a self-contradiction. Young Socrates still attempts to save this position with a metaphor of day, suggesting that just as a day is "in many places at the same time and is nonetheless not separate from itself", so can a Form remain one and the same when being partaken (131b). Parmenides, however, finds this metaphor unconvincing. He claims that the day metaphor unavoidably results in proposition (II), for it is just like covering many people with a sail which is a whole and over many. In this analogy, it is not the sail as a whole over each person, rather a part of it

would be over one person and another part over another (131b-c)—which is precisely advocated by (II). Accordingly, young Socrates has to concede that Form is divided and not being one during participation. Yet this proposition is also problematic. Parmenides offers young Socrates four puzzles:

(i) If *x* becomes large by participating in the Form Largeness, according to the proposition (II), it participates a part of Largeness. And the part is undoubtedly smaller than the whole. So *x* becomes large by something small, which is obviously absurd. (131c-d)

(ii) If *x* becomes equal to something, it has to share a part of the Form Equalness. But a part of Equalness is explicitly less than Equalness, and hence it has to be unequal. So *x* becomes equal by participating in something unequal. (131d)

(iii) If *x* becomes small, it has to participate in a part of the Form Smallness. Then, the Smallness as a whole must be larger than the part of it. So, *x* becomes small by participating in something large. (131d)

(iv) If *x* participates in the Form Smallness, it should become small. But by this participation, a part of Smallness is added to *x*, hence *x* becomes larger than it was. So *x* seems to become both small and large during this process. (131d-e)

It is of no difficulty to notice that according to these arguments, Forms are forced to be both *F* and not-*F* at the same time—which precisely mirrors the ridiculous result of proposition (I), wherein a Form is both one and many. And moreover, the Form *F*-ness itself is proved to be not-*F* as well. And a sensible thing *x* may become *F* by participating in a

Form which is not-*F*, obviously contradicting the mechanism of change in Plato's first model.

As challenges to young Socrates' Form theory, these arguments work in two relevant aspects. On the one hand, that the Form is both *F* and not-*F* is precisely what Parmenides is asked to prove in order to refute young Socrates' argument against Zeno. Zeno claims that (1) if things are many, they must be both like and unlike, but (2) it is impossible for anything to be both like and unlike, thus (3) it is impossible for things to be many (127e). As previously noted, premise (2) draws from the Eleatic principle that What-is always is and cannot be What-is-not. However, young Socrates partly rejects premise (2), restricting the applicable scope of this Eleatic principle only to the fields of Forms. In his theory, sensible things are many and able to possess opposite properties by changing, while Form always is and cannot be both *F* and not-*F*. By the end of his speech, young Socrates challenges Zeno and Parmenides to contest his solution by demonstrating that Forms can also combine and separate like sensible things—thereby, being both *F* and not-*F* (129e-130a).[189] If they succeed in doing so, then young Socrates' distinction between Forms and sensible things is untenable, and hence his denial of Zeno's premise (2) as well as his whole idea will fail. Now, Parmenides successfully meets this challenge, overturning Socrates' stance.

On the other hand, those *reductio ad absurdum* arguments of Parmenides also threaten the foundation of Plato's theory of change and motion, particularly when one considers that young Socrates' assertion indeed represents middle Platonic metaphysics and his first model of change and

[189] Cf. Allen, 1997: 99-102.

motion. In the *Phaedo*, the old Socrates posits that the Forms obey the Eleatic principle of What-is for they always remain the same and in the same state, while the sensible particulars change between opposites from time to time (*Phd*. 78c-e). This stability of Forms then qualifies them as the cause of change in Socrates' safe answer. He is not satisfied with the natural philosophers' explanations of the cause for everything to come to be and pass away. The causes they provide, such as natural elements, seem paradoxical to Socrates as the same cause may produce opposite effects on the same thing, or opposite causes may generate identical outcomes. For instance, one can be considered as the reason for things to be one when they are separate from each other, but it may also be the cause of their becoming two when they come near to one another. And moreover, one's becoming two could be caused both by division and by being added to another (97a-b). A head could both make the man taller than one and shorter than another at the same time (100e-101a). Therefore, Form is Socrates' safe answer for the cause of change. Because Form always remains the same, and it will necessarily cause a sensible thing to become *F* and never force it to own the opposite property. Beauty, for instance, is the reason for a thing to become beautiful and it will by no means make something ugly (100d-e). Obviously, the Eleatic principle of What-is paves the foundation for the Form to become the core of the mechanism of change in Plato's first model. However, now Parmenides' arguments fundamentally dismantle this foundation. He shows that based on young Socrates' theory—as well as middle Platonic metaphysics—a Form has to be both *F* and not-*F*. Moreover, a thing could be both *F* and not-*F* by participating in the same Form *F*-ness, and it may also be *F* by partaking in opposite Forms of

not-*F*-ness. Consequently, Form can no longer be the reason of change as articulated in Plato's first model of change and motion.

It is clear that young Socrates' solution, as well as Plato's first model, includes the following four core premises:

(a) the existence of Form;
(b) the character of Form that it always is—namely, it cannot be both *F* and not-*F*;
(c) the participation relationship between Form and the sensible thing;
(d) the mechanism of change based on partaking a Form.

Given our preceding analysis which renders Socrates' solution untenable, these four premises cannot all be accepted at the same time. Does Plato suggest giving up one or more of these four premises to resolve this conundrum? In other words, where does the flaw of Plato's first model lie in the light of the participation puzzle?

Evidently, Plato does not discard the existence of Forms. At the end of his objections, he says, "if someone, having an eye on all the difficulties we have just brought up and others of the same sort, won't allow that there are forms for things and won't mark off a form for each one, he won't have anywhere to turn his thought, since he doesn't allow that for each things there is a character that is always the same. In this way he will destroy the power of dialectic entirely." (*Prm.* 135b-c). Thus, Form does exist and it is always the same, just as presented in Plato's first model. Young Socrates' comprehension of them is not wrong but inaccurate because of his lack of proper philosophical training (135c-d). And besides,

the premises (c) and (d) also appear in the text. For instance, in the so-called Appendix, getting a share of being is called 'coming-to-be' and parting from being 'ceasing-to-be' (156a). Hence, the reason of change continues to rest on the participation of Form.[190] Therefore, the premise most likely to be given up is (b): the Form cannot possess opposite properties by being both *F* and not-*F*.[191] If so, although Plato still maintains the idea that by participating in a Form the sensible thing comes to possess the corresponding property, the mechanism of change may no longer be based on the assumption obeying the Eleatic principle of What-is, from which Socrates argued in the *Phaedo* that the Form always is and cannot be both *F* and not-*F*. Thus, the participation puzzle implies that the Eleatic principle which is the foundation of Plato's first model may be problematic.

To be precise, this is at most merely an implication in the *Parmenides*, where the interlocutors never directly argue for this point. Notably, the Eleatic principle explicitly constitutes the bedrock of Zeno's argument. A detailed argument addressing this will not be offered until the *Sophist*—a dialogue aiming to make a thorough reckoning of Parmenides' metaphysical legacies. This issue will be further explored in the subsequent section.

2.3 The Classification and Essence of Motion

Most scholars agree that the second part of the *Parmenides*, as the philosophical training, includes eight Deductions and one additional

[190] But as we will argue in the discussion of the *Sophist*, to participate a Form is no longer necessarily causing a generation.
[191] Also cf. Rickless, 2007; 2020.

Appendix to the first two Deductions—the issues of motion and change are also involved in this part of the text. Rather than focusing on the conclusions of those deductions—which may indeed have no specific conclusion—we need to pay more attention to their premises. Our intent is to analyze and probe the concepts of all kinds of motions and changes embedded in these premises. As will become evident, in this text the interlocutors introduce the discussions of the classification and the essence of motion. They intimate an ontological and reflective insight into the metaphysics of Plato's first model of change and motion. Specifically, the Eleatic principle of What-is will eventually ruin the distinction between generative change and non-generative motion. If the Parmenidean doctrine is strictly obeyed, the alleged non-generative motions should not exist, since all motions are posited to be generative.

Let's first examine the classification of motion. In the first deduction, Parmenides provides a systematical account of a variety of motions:

> "Then consider whether, since it is as we have said, it can be at rest or in motion (ἑστάναι ἢ κινεῖσθαι) … Because if it moves, it would either move spatially or be altered (ὅτι κινούμενόν γε ἢ φέροιτο ἢ ἀλλοιοῖτο ἄν), since these are the only motions." (*Prm.* 138b7-c1)

It is clear that motion is claimed to be the genus, branching into spatial motion and alteration as its only species. Next, the division is supplemented in the following aspects. First, spatial motion further bifurcates into rotation and displacement (138c4-6). The former signifies a motion 'spin[ning] in a circle in the same location', while the latter is

‘chang[ing] from one place to another’. Second, numerous paired motions are designated under alteration: becoming one and becoming many; becoming alike and becoming unalike; increasing and decreasing, etc. (156b1-8; 157a4-b5) Especially, as Cornford argues, assimilation and dissimilation seem to be alterations in quality, while increase and decrease are alterations in quantity.[192]

This formulation obviously recalls the similar one found in the *Theaetetus* (*Theaet*. 181c-d). And it is also reiterated elsewhere in this dialogue. For instance, in the fifth Deduction, Parmenides enumerates locomotion, rotation and alteration as the sole possible approaches to movement (*Prm.* 162b9-e3). Moreover, this classification is also echoed in the *Laws* X 893b-e. Besides, the classification may be confirmed by Parmenides’ descriptions of those motions as well. In the second Deduction, he posits that what moves is (always) in a different thing and never in the same thing. When it moves, it will stir from itself (*Prm.* 145e-146a). This description explicitly covers his definitions of locomotion and alteration. For in the first Deduction, he claims that what undergoes an alteration must alter from itself and not be the same one (138c). Locomotion is also argued to be change of place by going somewhere and coming to be in something (138d-139a). By this logic, through locomotion, an entity enters into another thing and leaves the previous one or itself. And given that what has a rotation must spin in a circle and be “poised on its middle and have other parts of itself that move round the middle” (138c), it is reasonable to infer that these rotating parts—and the subject as a whole—come into something else and leave themselves too. Therefore, all these kinds of changes satisfy Parmenides’ definition of motion by

[192] Cornford, 1939: 197.

owning the crucial character that they make the subject come to be in a different thing stirring from itself.

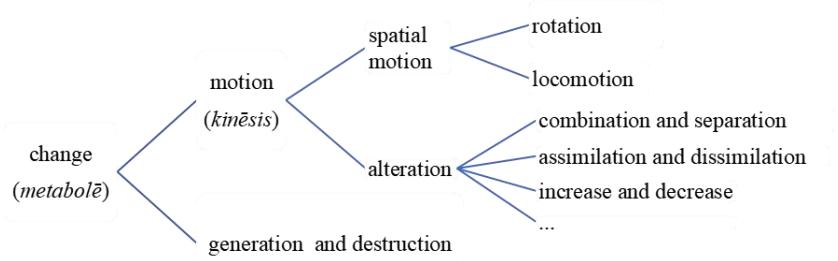
But where shall we place coming-to-be or generation and destruction? As noted before, in this dialogue coming-to-be is unsurprisingly defined as "getting a share of being" while ceasing-to-be as "parting from being" (156a; 163d). These definitions are undeniably based on the participation theory. Some scholars, such as Allen, refuse to classify generation and destruction as two species of motion, for in the Appendix they are discussed distinctively from motions such as alteration and locomotion (156a-b).[193] This judgment is not unreasonable. Indeed, when outlining his plan of deductions, Parmenides explicitly treats generation and destruction alongside motion and rest, saying that "[i]f you hypothesize, if likeness is or if it is not, you must examine what the consequences will be on each hypothesis…and the same method applies to unlike, to motion, to rest, to becoming and destruction (καὶ περὶ κινήσεως καὶ περὶ στάσεως καὶ περὶ γενέσεως καὶ φθορᾶς), and being itself and not-being" (136b). This parallel may echo the poem of the historical Parmenides in which the latter enumerates these categories in a similar way. He writes that, "[t]herefore all those things will be a name, which mortals, confident that they are real, suppose to be coming to be and perishing (*gignesthai te kai ollusthai*), being and not being (*einai te kai ouki*), changing place and exchanging bright colour (*kai topon allassein dia te chroa phanon ameibein*)" (B.8.38-41).

Then, in the *Parmenides*, Plato proposes a more inclusive categorical term encompassing both motion and generation. In the Appendix, when

[193] Allen, 1997: 233.

juxtaposing coming-to-be and ceasing-to-be with motions, he designates the former as “the other changes” (156e). Clearly, both motions and generations belong to the alleged “changes”. Thus, though Plato always uses these terms κίνησις, μεταβολή and even ἀλλοίωσις interchangeably without clear demarcations, within this text of *Parmenides* the term change (μεταβολή) is explicitly used to denote a most general genus containing all sorts of motions as well as generation and destruction as its species.

This may be further solidified by Parmendies’ definition of change. He seems to consider change as something that occurs between two opposite states (156d). And it is more explicitly expressed by his formulation “which is both so and not so signifies a change” found in the fifth Deduction (162b-c). Generation, then, is undoubtedly a kind of change, for it represents a shift between non-being and being (156a-b; 156e-157a; 162c, etc.). Alteration also satisfies the criterion for change by being a transition between opposite properties *F* and not-*F*—such as many and one; like and unlike; small and large (157a-b). Even locomotion, as previously discussed, is understood as coming to be here at one time and there at another (138d). Therefore, all sorts of generations and motions can be described as transitions between so and not so, hence they all belong to the common genus change. Consequently, we now acquire a seemingly complete picture of Parmenides’ classification of changes and motions:



Until now, this picture appears roughly compatible with Plato's first model of change and motion at first glance. Given that generation and destruction are separated and independent categories paralleling with motions that encompass spatial motions and alterations, it may suggest that some of the motions may be non-generative. And further, here Parmenides admits that the thing comes to be by participating in a being, but at the same time he does not guarantee that all motions result from such kind of participation. This appears to be quite similar to Plato's first model of change and motion, in which he advocates that some motions, like locomotion and activities of the soul, are non-generative for they don't partake in the Forms.

However, this hypothesis cannot be confirmed at all. The system of change delineated in the *Parmenides* does not follow Plato's first model but seriously challenges it. The classification alone does not tell the complete story. Indeed, as illuminated in the text of the fifth Deduction, Parmenides negates the possibility of non-generative change by representing and analyzing the essences of changes and generation.

Within this Deduction, Parmenides first initiates a discussion on the relationship among various sorts of changes by claiming that,

> "Can something that is in some state not be so, without changing from that state? –It cannot. –So everything of the sort we've described, which is both so and not so, signifies a change (μεταβολή). –Doubtless. –And a change (μεταβολή) is a motion (κίνησις)—or what shall we call it? –A motion (κίνησις). –Now wasn't the one shown both to be and not to be? –Yes. –Therefore, it appears both to be so and not so. –So it seems. –Therefore the one that is not has been shown also to move (κινεῖν), since in fact it has been shown to change (μεταβολή) from being to not-being. –It looks that way." (162b-c)

Three kinds of change are mentioned in this text. Change is probably the most general genus that we discussed above because it is described as being "both so and not so"—that is, being one state and not being this state—which is precisely how the genus change is defined in the Appendix (156d). Then, the text also mentions a change transforming being to non-being, which unmistakably refers to the concept of ceasing-to-be. And clearly this sort of generation is believed to be one species of change, for the transition between being and non-being is a special case of change between so and not so. What the term 'motion' refers to remains unspecified in the meantime. But since he immediately continues to analyze that one cannot move if one neither alters, rotates in the same things, nor switches place (162c-e), 'motion' must refer to the one which is defined as not being in the same thing in the first Deduction encompassing both spatial motion and alteration.

But the relationship among these terms may be problematic, because in the passage cited above Parmenides says that "a change is a motion" (162c). If 'motion' in this passage refers to a category parallel to generation and if 'change' refers to the most general genus, how could they be identified with each other?[194] According to the classification of change, motion should logically be a species of the genus change. The interlocutor soon informs us of the answer in the following text,

> "Furthermore, if in fact it moves (κινεῖν), it certainly must be altered (ἀλλοιοῦσθαι); for however something is moved, by just so much it is no longer in the same state as it was, but in a different state. –Just so. –Then because it moves (κινεῖν), the one is also altered (ἀλλοιοῦσθαι). –Yes. –And yet, because it in no way moves (κινεῖν), it could in no way be altered (ἀλλοιοῦσθαι). –No, it couldn't. … –Must not that which is altered (ἀλλοιοῦσθαι) come to be (γίγνεσθαι) from what it was before, and cease to be in its previous state; and must not that which is not altered (ἀλλοιοῦσθαι) neither come to be (γίγνεσθαι) nor cease to be? –Necessarily." (162e-163b)

In short, all sorts of changes share the same nature that all of them are essentially generations. A motion must be an alteration, regardless of whether it is a spatial motion or an alteration. Based on the definition of motion, whatever undergoes a motion cannot remain in the same thing, then it apparently comes to refresh its state, so it alters from its previous state to this new state. Even when undergoing a spatial motion, the

[194] Cf. Chen, C.-H., 1982: 334-336.

subject has to change its locational state such as ‘here’ or ‘there’ during this process. So all motions are basically some sort of alteration. Moreover, alteration inherently contains generation and destruction as its essence. An alteration is understood as the ceasing-to-be of its previous state and coming-to-be of its new state, indicating that the previous one perishes and a new similar one generates its fresh state. This generative nature underscores the essence of all motions and changes.

Indeed, this generative essence is consistently alluded to throughout the deductions. In the first deduction, Parmenides asserts that a subject, when undergoing an alteration, cannot still be one (138b-c). And the locomotion, again, is to change places by coming-to-be here at one time and there at another (138d).[195] He further posits that a subject in motion is never in the same thing. It has to stir from itself during the motion (145e-146a). Besides, in the Appendix, it is noted that when one thing becomes many, it must cease to be one and come to be many (156a-b). Namely, the new many thing comes to be and replaces the previous one which perishes immediately. Finally, in the sixth Deduction, Parmenides overtly contends that without coming-to-be and ceasing-to-be by getting a share of being and losing it, nothing can possess an alteration nor move at all (163d-e). Throughout all these arguments, Parmenides persistently reinforces this foundational ontological proposition time and again: all sorts of motions and changes will force the subject not to be the same one and undergo a generative becoming.

[195] This is similar to the argument of Gorgias (Ps.-Arist. *MXG* 980a = LM. D.26, 14) as we have cited in the first chapter.

Therefore, although Parmenides provides a systemic classification of changes, all these changes basically share the same essence and are all generations. How, then, does it threaten Plato's first model of change and motion? In brief, this model allows the existence of non-generative motion, while this dialogue seems to refute it. According to the first model, anything that partakes in a Form undergoes a generative change, while a motion unrelated to the participation of a Form is a non-generative motion. Alteration is apparently generative, but spatial motion and the activity of the soul fall within the category of non-generative motions. And as we have argued before, this model is somehow built on the restrictive and adoptive acceptance of the Eleatic principle of What-is. That is to say, What-is must always be and cannot not be what it is. If it undergoes a change and comes to be what is not, it has to perish and be replaced by a fresh similar one. At the same time, the spatial motion and activity of the soul, since they are not associated with any share of Forms, will not affect the status of What-is by making the latter become What-is-not. Hence the entity could remain the same during these motions, and thus the latter are considered non-generative. However, in the *Parmenides*, it is contended that even the smallest locomotion necessitates a change in state and compels the entity to come to be a new one, denying that any motion is non-generative. The fundamental ontological reason is that no matter what sort of motion must change the entity's state according to the definitions of changes, as detailed in our prior analysis. Consequently, no motion—even spatial motion—can escape from the effect of the Eleatic principle of What-is. This challenges the distinction Plato's first model draws between generative change and non-generative motion, undermining its validity. Indeed, this is exactly the same as the idea of the historical Parmenides and the Eleatic

School—especially of Melissus who asserts that even the slightest change, as minuscule as becoming different by a single hair in thousands of years, results in destruction (DK30 B7).

Thus within the *Parmenides*, it appears Plato seeks to elucidate that the rigorous adherence to the Parmenidean principle renders the first model untenable. This tension will be further explored in the *Sophist*. Additionally, as discussed in this section, Plato implies the flaws of the concept of Form and the doctrine that it cannot be both *F* and not-*F*, and the dialectic reflection of these two points will be revealed in the subsequent dialogue.

3. The *Sophist* and the Parmenidean Doctrine

The story of the *Sophist* directly succeeds the *Theaetetus*. While the *Theaetetus* contains a discussion about the definition of knowledge between Socrates and Theaetetus, the subsequent conversation of the *Sophist*—occurring one day later—features Theaetetus and the Eleatic Stranger as its principal interlocutors. The latter's familiarity with the theory of the Parmenidean school is quite evident, as Theodorus claims "[h]e's from Elea and he's a member of the group who gathers around Parmenides and Zeno" (*Sph*. 216a). Therefore, after the beginning of introspection in the *Theaetetus* and the detailed review in the *Parmenides*, in the meantime we the audience are finally qualified to reflect on the Parmenidean doctrine and the ontological basis of Plato's first model, guided by the arguments of the Eleatic Stranger.

The reflection in the *Sophist* is quite profound, inspecting every premise regarding motion in Plato's first model. The interlocutors even attempt to

prove the mutability of the Forms. In his arguments against the Friends of Forms, the Eleatic Strangers says,

> "—We have to reply that we need them to tell us more clearly whether they agree that the soul knows and also that being is known. –'Yes', they say. –Well then, do you say that knowing and being known are cases of doing, or having something done, or both? Is one of them doing and the other having something done? Or is neither a case of either? –Obviously neither is a case of either, since otherwise they'd be saying something contrary to what they said before. –Oh, I see. You mean that if knowing is doing something, then necessarily what is known has something done to it. When being is known by knowledge, according to this account, then insofar as it's known it's changed by having something done to it—which we say wouldn't happen to something that's at rest. –That's correct." (*Sph*. 248d-e)

In this conversation, the Stranger seeks to establish that being can be changed and moved. For it is obviously able to be known and to be known is to be affected, hence being is changed by being affected and known. The Stranger further enhances this argument by immediately forcing Theaetetus and the Friends to concede that the movable things, such as change, life, soul, and understanding, must be present in "what completely is" (248e-249b).[196] Therefore, being is able to move or even change.

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[196] The phrase τὸ παντελῶς ὄν has two main possible translations. Some scholars translate it as "what perfectly is". And the other prefer the translation "what completely is". Cf. Politis, 2006: 160-163; 173, n.7-8; Wiitala, 2018: 187-192.

Yet, scholars widely concur that this perspective stands in contrast to Plato's middle metaphysical theory, prominently articulated in the *Phaedo* and the *Republic*. In those dialogues, as we have sufficiently seen, Forms, as beings, are always stable and never change, while sensible things are always in flux and coming to be. How, then, shall we understand this apparent disaccord between the view of the Eleatic Stranger and Plato's middle theory? There are at least three kinds of influential interpretations, all of them aiming to bridge this philosophical disparity. First, some scholars, such as Malcolm, seem to simply advocate that neither the Stranger nor Plato himself endorse the argument of mutable beings at all.[197] Similarly, Vlastos provides his arguments against the view that Plato accepts the critical premise "to be affected is to move". This premise, he believes, is ascribed to the Friends of Forms to explain why the Friends—rather than Plato himself—would run into fatal self-contradiction by eventually conceding that the changeless knowledge has to be mutable.[198] Besides, some opinions tend to concede the incongruity between Stranger's argument and Plato's own theory, but regard it as predominantly superficial. Wiitala outlines two representative opinions.[199] On the one hand, some support a relational change reading, where those changes (i.e. to be known or to be affected) are just relational and extrinsic, allowing the Beings themselves to remain unchanged during those changes. So the Forms, even if they are in motion with respect to others by being known, are strictly remaining static and changeless in relation to themselves. Therefore, the puzzle ascribed to the Friends of the Forms can be immediately solved by introducing relational

[197] Malcolm, 1983.
[198] Vlastos, 1970: 309-317.
[199] Wiitala, 2018: 172-173.

predicates.[200] On the other hand, another perspective contends that the puzzle arises from the Friend's overly narrow understanding of Beings. Instead, alongside the changeless Forms, some movable bodies (such as the ensouled living bodies) also should qualify as beings, though distinct from the Forms. Therefore, while certain beings are movable, others—namely the Forms—still remain unchanged and are the objects of knowledge as claimed in Plato's middle dialogues.[201]

Despite technical differences among them, these views converge on a common foundational belief. Each, to varying degrees, posits that the arguments of the *Sophist* cited above remain consistent with the framework of Plato's middle metaphysics. According to these viewpoints, the alleged mutable being either signifies relational change rather than real change, or refers to the bodies instead of Forms, if Plato himself does endorse these ideas. They all concur that Form must avoid undergoing any real change. Thus, the arguments in the *Sophist* can be seen as a continuum of Plato's middle theory and especially his ontological understanding of change, at most with some slight improvements.

However, this view may not capture the truth. On the contrary, the Stranger's arguments highlight foundational shortcomings in Plato's metaphysical theory presented in his previous works, laying the groundwork for a fresh interpretation concerning the ontology of being.

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[200] The relational change theory, of course, could be traced back to Geach and Irwin. Cf. Geach, 1969: 71-72; Irwin, 1977; 1992: 55; 1995: 161-163; Fine, 1993: 54-57; 1996: 105-133; van Eck, 2009: 210. Those who use this concept to interpret the text of the *Sophist*, cf. Reeve, 1985; McPherran, 1986; Lentz, 1997; Buckels, 2015. A more complete list cf. Wiitala, 2018: 172-173, n.5.

[201] Such as, Cornford, 1935: 239-248; Keyt, 1969; Ketchum, 1978; Brown, 1998. Further, cf. Wittala, 2018: 173, n.7.

This clearly brings with it a novel understanding of motion. Indeed, the dialectal arguments that concern us in the *Sophist* can be characterized as a ring-composition.[202] First, (1) the interlocutors examine the puzzle of "What-is-not is" stemming from the Parmenidean principle. (2) The Eleatic Stranger further argues that this difficulty also manifests prominently in the issue of motion. As Wiitala elucidates, the Stranger's arguments against the Friends of Forms on the mutability of Beings, always neglected, are part of his broader endeavour to show that What-is-not is.[203] Thus finally, (3) the discussion of motion, revealing the ontological structure of Being, helps to solve the primary difficulty of What-is and What-is-not.

3.1 The Stranger's Puzzle of What-is/What-is-not and the Parmenides' Doctrine

At 235a, affirming the sophist as an imitator and magician, the interlocutors turn to clarify the specific craft of imitation inherent to the sophist. The craft of imitation includes two kinds of arts: likeness-making and appearance-making. The former, according to the Stranger, is an imitation produced "by keeping to the proportions of length, breadth, and depth of its model, and also by keeping to the appropriate colours of its parts" (235d-e). And the latter is employed by someone who sculpts or draws very large works. As the Stranger describes, "[i]f they reproduced the true proportions of their beautiful subjects, you see, the upper parts would appear smaller than they should, and the lower parts would appear larger, because we see the upper parts from farther away and the lower parts from closer…So don't those craftsmen say goodbye to truth, and

[202] Similarly, Kahn, 2015: 122.
[203] Wiitala, 2018.

producer in their images the proportions that seem to be beautiful instead of the real ones?" (235e-236a) Succinctly, the likeness-maker imitates the real proportion of the subject, while the appearance-maker merely imitates its seeming proportion.

This dichotomy, obviously, recalls us Plato's assertions in the Book X of the *Republic*, in which Socrates claims—as a metaphor—that there are three kinds of beds. The bed in nature is created by a god, the one produced by a carpenter is the imitation of the first bed, and the last one made by the painter has to be an imitation of the second bed by imitating the appearance of the bed (*Rep.* 597b-598b). The story of Three Beds undoubtedly relies on the metaphysics argued for in the *Republic* and other middle dialogues: only the Beings or the Forms really and permanently are, whereas the sensible beings only come to be by participating in the corresponding Forms. These sensible things, hence, can be both being and not-being, both *F* and not-*F*. For instance, a beautiful sensible thing can be beautiful in some aspects but ugly in other aspects, or beautiful at one time but become ugly later (478e-479d). As underscored in the previous chapters, this view is built on Plato's acceptance of the Parmenidean principle that What-is always is and it cannot be What-is-not. Plato deems this a fitting description of Forms. Concurrently, he concedes to Parmenides' doctrine to some extent. He agrees that the sensible, as What-is-not, are never the real being, but they can be both *F* and not-*F* by participation.

It is apparently the same in the *Sophist*. The products of both likeness-making and appearance-making are not real Beings but their imitations—though meanwhile the Stranger hasn't specified which craft

belongs to the sophist. Therefore, the Stranger summarizes, "this appearing, and this seeming but not being, and this saying things but not true things." (*Sph.* 236e) This is undoubtedly true for Plato's middle works. However, the Stranger now exposes the fundamental frailty of this metaphysics of What-is and What-is-not presented in the *Republic* and other middle dialogues.

In the *Republic* and other middle dialogues, a foundational depiction of the sensible can be summarized as:

(1) The sensible being *x* is *F* and is not-*F*.

A sensible thing is *F* by imitating the corresponding Form *F*-ness, yet at the same time it is not truly *F*—as only the *F*-ness can be permanently and really *F*—so it is both *F* and not-*F*. And at the same time, a more general formulation could be derived from (1) that,

(2) The sensible being *x* is and is not.

As delineated in the *Republic* or other middle dialogues, "*x* is and is not" does not only signifies that *x* is both *F* and not-*F*, but also it exists and not exists.[204] The *x* as a sensible thing is not What-is or the real Being, so it is not. But it can participate in the latter, hence it also is to a degree. So, in the *Republic*, the sensible is construed as the intermediate between the real Being and nothing (*Rep.* 478c-e).

[204] The existential and predicative senses of Being, cf. Kahn, 2009. And also our previous analysis in the first chapter.

However, in the *Sophist* the Stranger immediately emphasizes that to say the sensible thing *x* is "seeming but not being" (*Sph.* 236e) will be extremely confusing. Indeed, this premise cannot be true under Parmenides' doctrine. Because premise (2) has to contain that,

(3) What-is-not is.

For *x* is undoubtedly a What-is-not, but it is required to be to some extent. So it must result in the formulation that "What-is-not is" (236e-237a). But Parmenides requires that "[n]ever shall this force itself on us, that what is not may be." (237a) As a result, Parmenides' principle that "What-is is" and "What-is-not is not" appears contradictory to the interlocutors' primary attempt in the *Sophist* to grasp the imitations of Beings—an attempt, as we have discussed, rooted in Plato's understanding of the sensible in his middle dialogues.

But the sensible beings seem to avoid directly conflicting with Parmenides' principle in Plato's previous dialogues by asserting that the sensible are not real What-is, why does the similar theory now fail to be compatible with Parmenides' verse? There must be evident reason for the Stranger's dismissal, and it is illuminated in his subsequent arguments.

According to the Stranger's current argument, the sensible things, or What-is-not, cannot have any meaningful predication. For based on the Parmenidean principle, such a sensible thing, as a What-is-not, cannot be applied to any of What-is or Being (237c). And since it is not What-is, it is not something, because a thing is unable to be isolated from Beings (237c-d). So, a sensible thing cannot really be a beautiful, just or other

similar thing, given that the beautiful and the just are clearly not isolated from Beauty and Justice. So, it leads to the proposition,

(4) What-is-not is not an *F* thing.

If (4) stands, it suggests that What-is-not cannot be said to be *F*. Strengthening this view, the Stranger further introduces a supplementary argument. He posits that if x is something or x'es are something(s), one must accede that *x* is one thing or x'es are plural things (237d). But the quantities—one, plurality, or others—are Beings (238a). So it is fallacious to claim *x* is anything. For if the sensible x is one thing, it necessarily indicates that x (What-is-not) is one (Being). Then, What-is not has to be a Being—the difficulty of (3) appears again (238b-c). Consequently, What-is-not can neither be one thing nor plural things, and similarly, it can neither be just nor unjust, beautiful nor ugly. This results in a counter-proposition to (1):

(1*) *x* is not *F* and is not not-*F*.

Thus, any attribution to a sensible thing has to become impossible. As the Stranger articulates, "[d]on't you understand, then, that it's impossible to say, speak, or think What-is-not itself correctly by itself? It's unthinkable, unsayable, unutterable, and unformulable in speech." (238c) This judgement, ironically, recalls Socrates' criticism of Heraclitus and his followers, suggesting their doctrine of flux undermines the very possibility of language (*Theaet*. 179d-180c; 183a-b). Now, the Stranger's argument implies that Plato's middle theory may also produce the same situation. This analysis points out the critical flaw in Plato's middle

theory: it hardly achieves its goal of allowing the sensible being to be *F* by participating in the Form *F*-ness rather than becoming a real Being. Because this formulation unavoidably contains the assumption that What-is-not is—which of course diametrically opposes the Parmenidean principle.[205]

The Stranger goes one more step in his next argument, contending that even (1*) is not sufficiently precise. This is because by asserting that What-is-not is unutterable, unsayable and inexpressible, we inadvertently attribute being to What-is-not by appending "is" to the What-is-not in this formulation (238e-239a). In short, "to be" indicates "to be something", which further alludes "to be a Being". From this, we derive a counter-proposition to (3):

(3*) What-is-not (*x*) cannot be.

In other words, any attempt to predicate the What-is-not—no matter in a positive or negative sense—initially presupposes that What-is-not is something or Being by attaching the "is" to What-is-not. Thus, if we persist in predicating the imitations or the sensible, we have to make an apparent self-contradictory formulation that What-is-not is (240a-b).

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[205] Strictly speaking, in the *Republic* Socrates does not call the sensible being "What-is-not" but rather something between What-is and What-is-not. In this text, Socrates also recognizes that What-completely-is-not is impossible to be known or opined for it does not exist at all (*Rep.* 478b-479d). But this does not indicate that Socrates in the *Republic* shares the same opinion with the Stranger in the text of the *Sophist* discussed here. Because apparently in the *Republic* the "What-is-not" merely refers to what completely does not exist, while in the *Sophist* What-is-not refers to the sensible beings, or more literally, the imitations of the real Beings.

Therefore, the Stranger's arguments reveal the critical dilemma. The effective predication of What-is-not and the Parmenidean doctrine that "What-is is and What-is-not is not" cannot be reached at the same time. Obviously, Plato's middle theory of sensible being is built on these two points. Now, since these two foundational principles have been demonstrated to be mutually exclusive, the Stranger, without any hesitation, proposes attacking the Parmenidean principle and arguing for the seemingly self-contradictory premise that What-is-not is (241d-e).

3.2 The Issues of Motion and the Mutable Being

The Stranger, then, announces to "begin this dangerous discussion" against the Parmenidean principle (242b). In order to achieve this goal, he endeavours to probe the meaning of "being", shedding light on how the Parmenidean principle essentially leads to the self-contradiction of Plato's first model of change and motion.

In this part of text, the Stranger first tries to elaborate the different opinions of Being(s) espoused by the pre-Socratic philosophers. And then, he claims that "[i]t seems that there's something like a battle of gods and giants among them, because of their dispute with each other over being." (246a) The "giants", he notes, solely admit the body (*sōma*) which is visible and tangible as being and vehemently rejects the notion that "something without a body is" (246a-b). On the contrary, the "gods" or the "Friends of the Forms" are portrayed as proponents of the belief that,

> "Therefore the people of the other side of the debate [viz. the Friends of the Forms] defend their position very cautiously, from somewhere up out of sight. They insist violently the true

> being is certain nonbodily forms that can be thought about. They take the bodies of the other group, and also what they call the truth, and they break them up verbally into little bits and call them a process of coming-to-be instead of being." (246b-c)

In this passage, the interlocutor presents the opposite ideas advocated by two distinct groups of philosophers. One believes that only material things can be beings, while the other maintains that the Form which does not suffer any process of becoming is the real being. And moreover, the Stranger points out that "the giants" or the former philosophers can hardly answer whether the invisible virtues such as justice and intelligence could be deemed as being (247b-c). So he tries to persuade them to accept a refinement of their theory by conceding that being is a thing owning the capacity to do or to be done (247d-e). Namely, being is what is mutable. On the contrary, the Friends of the Forms appear to dichotomize everything into two categories: becoming and being. They are said to believe that "by our bodies and through perception we have dealing with becoming, but we deal with real being by our souls and through reasoning…being always stays the same and in the same state, but becoming varies from one time to another." (248a)

This battle among them clearly recalls Socrates' earlier unfinished endeavour to scrutinize the theories of "the fluent fellows"—namely, Heraclitus and his followers—and the Eleatic philosophers who champion "the whole" (*Theaet.*179d-184a). And previously argued, in that place Socrates, asserting that he may not understand Parmenides' genuine intent, refuses to critically examine the doctrine of Parmenides after he seriously criticised Heraclitus' Flux theory (184a). However, after

hearing the conversation in the *Parmenides*, we the audience are now prepared to journey with the Stranger in further examining Parmenides' doctrine. Obviously, the giants criticized here are closely related to "the fluent fellows", as they both are purported to believe in the perpetual becoming of beings.[206] Moreover, we have argued in the previous section that in the *Theaetetus* Plato implies that the generative character of flux does not originate from Heraclitus but is rooted in the Parmenidean principle (pp. 105-106). And in the meantime, the Stranger directly asserts that this character of becoming is underscored by the Friends of Forms in their arguments against the "giants". For it is from the Friends' perspective, the becomings are "little bits" (*Sph*. 246b) and vary "from one time to another" without having any stability and identity (248a). 'Friends of Forms', then, clearly refers to those who are deeply influenced by the Eleatic school—such as Plato's middle dialogues. The strict dichotomy of being and becoming is quintessential to Plato's first model of change and motion which is built on the foundation of Plato's acceptance of the Parmenidean principle of What-is.[207]

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[206] Cornford argues that the Giants, or "materialists", include all philosophers and average people who believe that tangible body is the only reality. This opinion becomes dominative later, but before it many scholars prefer to identify the giants with some particular philosophers or schools, such as Antisthenes, Aristippus, the Atomists, and even Melissus. Cf. Cornford, 1935: 231-232; Bluck, 1975: 89; de Rijk, 1986: 100-102. We ought not to overly commit to the term "materialist", for this is not the only label the Stranger gives to the giants. They are also said to somehow hold the idea of flux (246b ff.). And indeed, in the *Theatetus* the fluent and the philosophers who agree with the flux theory share these two characteristics, too. They also advocate that the beings are sensible and flowing (*Theaet*. 152d-153e; 155e-157c; 180c-d; 182a-b, etc.).

[207] The Friends' theory undoubtedly represents Plato's philosophy as presented in the *Phaedo* and *Republic*. Cornford furthers claims that the Friends refers to all idealists who believe in unseen intelligible realities including Parmenides himself. Cf. Cornford, 1935: 242-243; Bluck, 1975: 93-94; de Rijk, 1986: 102.

Therefore, in the Stranger's subsequent reflection on the theory of the Friends of the Forms, he highlights a flaw inherent in Plato's first model presented in his middle dialogues. Namely, it would unfortunately culminate in the notion of the mutable being, as we briefly discussed at the beginning of this section. The Stranger posits that, according to the Friends of the Forms, the capacity to do something and have something done to itself ought to be owned by becoming rather than being (248c). This immediately precipitates the following dilemma. The Friends are compelled to acknowledge that "the soul knows and also that being is known" (248d). And this premise is proved to be highly problematic under their theoretical framework. On the one hand, if a being is known, it is acted upon and thus it is moved, but according to the Friends, the beings should be absolutely at rest (248d-e). On the other hand, the soul is also moving in its process of knowing the object. So if one strictly adheres to the Friends' theory, one must concede that "change, life, soul, and understanding are not present in what completely is," and Being should neither live nor think, but be "changeless, solemn, and holy, without any intelligence." (248e-249a) This is ridiculous for Plato and the interlocutors, because they clearly advocate that the soul is always moving and is definitely the real being. Plato not only accentuates the soul's ever-moving character in his middle dialogues such as the *Phaedrus*, but also elaborates upon it at length in his later works the *Timaeus* and the *Laws*. The Stranger also argues that it is fallacious to say that being "has intelligence, life, and soul, but that it's at rest and completely changeless even though it's alive" (249a). Therefore, the essential problem is that according to the Friends' theory, the mutable soul and the concept of being cannot be compatible with each other. The

Stranger posits that if the intelligence really is, it has to be the same, in the same state in the same respects (249b-c).

This predicament stems from the generative character of motion and change. The Friends advocate that the object of reasoning should be entities that always stay the same and in the same state (248a; 248e; 249c). Then, they apparently believe that any form of motion, such as knowing and being known, would force the being not to remain in the same state. In other words, from their perspective, these motions are unavoidably generative. Then, to repeat it again, this generative character of motion is a result of the Parmenidean principle of What-is. For given that "What-is is and What-is-not is not", anything divergent from What-is is inevitably What-is-not. Consequently, any motion, even the slight and subtle motion such as being known and knowing, would compel the entity to become something distinct from What-is or being. This presents a dilemma when considering the possibility of motion of the Form or Soul.

Then, since the position of the Friends is very close to Plato's first model, we can reasonably argue that here Plato provides a potential reflection of this model. He shows that the Parmenidean principle of What-is, as the foundation of the first model, will result in the dilemma discussed above. Namely, the first model has to face the difficulty that the soul cannot know the Form and the Form cannot be known. Otherwise, we are forced to accept the idea of a mutable being which is definitely rejected by Plato's first model and theory presented in his middle works.

One may doubt this view that the Friends' theory is not a precise representation of Plato's first model, because it is more extreme than the latter. As we have said in the previous chapters, according to Plato's first model, he advocates that some motions are not generative if they do not result from participating in a Form. But according to the Friends, the motion of being moved and acted upon by being known or the motion of the soul, for which participation is not relevant, is also thought to be generative. This observation is undoubtedly true. However, the possibility of non-generative motion has already been disproved in the *Parmenides*. In this dialogue, it is clarified that in accordance with the Parmenidean principle, strictly speaking, all kinds of motion will make the object become more or less different, and any difference of an object will definitely deprive it from its identity and force it to become a completely different thing. So, there is no room for the alleged non-generative motion, for all motions and changes are generative. Therefore, in the meantime, if we still insist on the Parmenidean principle of What-is, we have to concede that it is impossible for anything to move or be moved without undergoing a generative and becoming something it was not.

And as we have mentioned at the beginning of our discussion of the *Sophist*, some scholars advocate that this difficulty of mutable being could be easily overcome by considering those motions of soul and Forms as merely relational change.[208] According to this view, the motion of the soul and Forms should not be counted as the real change or motion. This idea, to repeat again, clearly tries to strike a compromise between the issue of the mutable being of the *Sophist* and Plato's first model. But it lacks a clear interpretation of how any motion can be relational and not

[208] Cf. Reeve, 1985; McPherran, 1986; Lentz, 1997; Buckels, 2015, etc.

real without conflicting with the Parmenidean principle. Even by undergoing an alleged relational change, the thing would clearly become something it was not. So, it does not provide the ontological tool to prove that some motions will not force What-is to become What-is-not and avoid the impossibility of non-generative motion.

In the text, this difficulty is obviously a special example of the more general problem which is revealed in the previous discussion of "What-is-not is". Then, as we will soon see, it will be solved in the Stranger's exploration to solve the difficulty of "What-is-not is" by reflecting on the Parmenidean principle.

3.3 The Stranger's Solution

Now, Plato's first model of change and motion is teetering on the edge because the foundation of it—especially the Parmenidean principle of What-is—has been seriously challenged. The Stranger has proved that though this principle plays a pivotal role in Plato's first model and theory presented in his middle works, it indeed destabilizes the entire theory. This is primarily because any predication of What-is-not unavoidably entails the proposition "What-is-not is", a direct contradiction to the Parmenidean principle. And the notion of a mutable being is, apparently, quite questionable in Plato's middle works. Consequently, the Parmenidean principle, as the interlocutors suggest, must be overturned. Addressing this is undeniably not an easy task, prompting the Stranger to propose a three-step solution. First, (1) the Stranger provides a primary attempt to solve the puzzle of mutable beings, which in turn lays the groundwork for the forthcoming argument of "What-is-not is". And then, (2) this puzzle remains unresolved until the Stranger introduces a novel

logical and ontological structure of Kind by distinguishing its properties acquired by nature and by combination. Finally, (3) this innovative structure, then, directly helps to argue against the Parmenidean principle and allows What-is-not to be. We shall delve into these arguments sequentially.

In the previous texts, the Stranger compels the Friends of the Forms to concede the dilemma that the absolute and motionless Beings must be able to move (248d-249b). An intuitive but superficial solution is soon proffered: What-is encompasses both what never changes and what changes (249d). Namely, both the mutable things—such as the soul—and the motionless things fall under the alleged being. The Stranger, however, immediately identifies a difficulty for this perspective. It indicates that everything (What-is) is motion and rest (250a) which seems to suggest that Motion and Rest equally are (250a). In other words, according to this opinion, Motion and Rest are Beings in the same sense. Then, we have to face the ridiculous deduction that Motion is identical with Rest. For if Motion is and Rest is, then Motion equals to Rest. This deduction is obviously built on the omitted premise that "to be" refers to a strictly identical relationship between the subject and the object. Namely, according to this premise, *a* is *b* if and only if *a* is completely identical with *b*, according to which only if a_1 and a_2 are respectively and completely identical with *b*, then can we reasonably say that a_1 is a_2. Therefore, since Motion and Rest both are (beings), it is undoubtedly indicated that Motion is equal to Rest.

The interlocutors obviously cannot accept this deduction, prompting the Stranger to claim "do you conceive What-is as a third thing alongside

them which encompasses Rest and Motion? And when you say that they both are, are you taking the two of them together and focusing on their association with being?" (250b) Thus, neither Motion nor Rest are identical with Being, and they only participate in Being. However, though this proposition is correct and is later endorsed by the interlocutors (254d; 259a), meanwhile this interpretation is soon revealed to be untenable within the current metaphysical construct. Because it results in the premise that "What-is doesn't either rest or move" (250c), but it seems to be impossible for anything to neither rest nor move (250c-d). This absurd deduction, again, also stems from the omitted premise previously mentioned. According to this premise, if *x* is *F*, it should be completely identical to *F*, and hence it necessarily owns the property of *F*. Then, since Being is not Motion, it cannot acquire the property of Motion—namely, moving, so Being is not moving. And similarly Being is not rest because it is not Rest. This leads to the ridiculous conclusion that Being neither moves nor rests.

Therefore, given this current understanding, the proposition that "Everything (or Being) is motion and rest" cannot be meaningful in any way because of this omitted premise. And this premise is clearly coherent with the Parmenidean principle. For according to this principle, an entity can only be recognized as What-is if it is wholly identical to What-is, otherwise it can only be What-is-not. Hence, the Stranger needs to find a new way to interpret how the mutable things (such as the soul and known Forms) qualify as beings and how What-is-not is. And clearly, this new approach ought to exclude the omitted premise which only admits the strict identity sense of "Being".

To meet this stipulation, the Stranger restarts his exploration by asking how could the same thing be predicated by several terms (251a). Both interlocutors agree that this sort of predication is possible, otherwise we could only repeat the self-predication proposition "*F* is *F*" like the young people and old late-learners who only permit this sort of predication (251b-c).[209] And this view, undoubtedly, has already been rejected in previous discussions against the Stranger's first attempt to justify "everything is Motion and Rest" which merely permits the strict identical predication of "Being". Now, the Stranger advances by asserting that if only such self-predication is permissible, then we are unable to make any meaningful prediction for it actually forbids the combination between "Being", "Motion", "Rest" and all other Forms (251d-252c). Then, the interlocutors turn to examine how could these Forms associate with each other, which indeed emerges as the key to resolving the general puzzle of their whole discussion.

The solution includes three main sub-arguments. The Stranger first demonstrates that Being, Motion, Rest, Sameness and Difference are the five "most important" and independent kinds (*megista genē*). And then, by taking Motion as an example, he shows that those five kinds are able to associate with each other. Motion can even be combined with Rest. Thus, Motion, as a What-is-not, is. Finally, he proves the general premise that What-is-not is and then overturns the Parmenidean principle.

In the first sub-argument, the Stranger enumerates the five most important and independent kinds, and suggests the ontological structure

[209] The old late-learner, many scholars agree, is pointed at Antisthenes, a sophist contemporary to Plato and a student of Gorgias. Cf. Cornford, 1935: 254; de Rijk, 1986: 115.

of Being which foreshadows the key to solving the puzzle of the Friends. In the previous discussion, the Stranger has already mentioned three of them: Being, Motion and Rest. And now, he claimed that there are two more important kinds hidden in the relationship among them—namely, Sameness and Difference. The Stranger, further, argues that both Sameness and Difference are not identical with those three kinds (255a-e). And when he distinguishes Difference from Being, he indeed reveals Plato's new understanding of the beings:

> "But I think you'll admit that some of What-is's are said by themselves, but some are always said in relation to other things…But Difference always is in relation to another…But it wouldn't be if What-is and Difference weren't completely distinct. If Difference shared in both kinds the way What-is does, then some of the things that are different would be different without being different in relation to anything different. In fact, though, it turns out that whatever is different definitely has to be what it is from something that's different." (255c-d)

There are two main interpretations of this argument based on different readings of the Stranger's distinction between Being "by themselves" (*kath hauta*) and "in relation to another" (*pros alla*). The traditional one, which can be traced back to Diogenes Laertius, asserts that here the Stranger argues two senses of predications: the absolute and the relational. The former needs no other thing to clarify itself, such as in the case "Socrates is a man", whereas the latter can only be given with an additional interpretation or compare with others, such as "Socrates is

shorter than Theaetetus".[210] And the other interpretation, mainly argued and championed by Vlastos, believes that the aim of the Stranger is to make a division between the existence sense and copula sense of Being. "Being by itself", from this perspective, refers to a self-predication of Being, and "Being in relation to another" to the Being's being predicated of another thing.[211] We prefer the latter reading. This reading is more natural in the context of the Stranger's argument. The Stranger embarks on his argumentation by announcing that he is going to "give an account of how we call the very same thing, whatever it may be, by several names" at 251a. He first criticizes the idea of the young people and old late-learners who exclusively embrace self-predicative propositions such as "good is good" or "man is man" (251b-d). Then he underscores that we ought to also use "being" as a copula, only by which can we be able to state the proposition that "*x* is *F*" and allow one thing to associate with another in the way of participation (252a-c).

This dichotomy between self-predication and copula sense of Being, from our perspective, is might be the background of the Stranger's introducing Sameness and Difference as the most important kinds. At the beginning of this argument, he recapitulates the most important kinds which they have just been discussing—Being, Motion, and Rest—and the relationship among them: (a) Motion is Motion; (b) Rest is Rest; (c) Motion is different from Rest; and (d) Rest is different from Motion. Each of those three kinds "is different from two of them, but is the same as itself" (254d). It is obvious that in the cases "Motion is Motion" and

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[210] Malcolm, 2006: 275-277. Others, cf. Cornford, 1935: 282-285; Bluck, 1975: 148-150; Buckels, 2015: 320-322, etc.
[211] Ackrill, 1957: 1-2; Vlastos, 1970: 287, 288 n.44; 1973: 323-326; Reeve, 1985: 54-55.

"Rest is Rest", Being is used in the sense of self-predication. On the contrary, Being in the "Rest is different from Motion" and "Motion is different from Rest" is a copula signifying that Motion and Rest are not identical to each other. The former self-predication of Motion and Rest introduces the kind Sameness, while the copula Being in the latter case introduces the kind Difference. Then, when he attempts to prove the difference between Being and Sameness, he says, "if Being and Sameness doesn't signify distinct things, then when we say that Motion and Rest both are, we'll be labelling both of them as being the same" (255b-c). This suggests that in some cases (such as "Motion is Motion") Being, when referring to the self-predication of the subject, is quite similar to Sameness by signifying the identical relationship in the statement "Motion is the same as Motion". But apparently Being must be dissimilar with Sameness in some other aspects, otherwise Motion would be identical with Rest when we say "Motion is *F*" and "Rest is *F*". And clearly Being does not refer to a relational relationship but a copula predication in these propositions. Thus, the difference between Being and Difference lies in this: unlike Being both can signify the self-predication of the subject in a proposition and a copula predication, Difference is never used in a subject's self-predication for nothing is by itself different from itself.

This argument is pivotal for two main reasons. On the one hand, it elucidates the essence of Difference, which soon plays an irreplaceable role in his later argument regarding the combination relationship among all five most important kinds. For it allows every kind to be by participating in Being without being identical with Being because they are different from Being. On the other hand, it unveils the ontological

structure of these kinds, which is also the key to solving the Parmenides' puzzle. Given that Being has already been demonstrated to possess dual senses, every kind that could combine with Being embodies two corresponding layers. Take Motion as an example, in the case "Motion is Motion", Being is used in its self-predicative sense, emphasizing the mere and core property which the kind Motion itself owns—namely, motion. Conversely, in the case "Motion is different from Rest", Being is used in the role of the copula, implying the corresponding property of Motion, "being different", does not exist inherently in the kind Motion. And such sort of property is attainable by the subject solely through a combination with other kinds, just as Motion is different not by itself but by associating Difference (255e).

This dichotomy is not only linguistic or logical. Instead, the Stranger directly designates the self-predicative property as the nature of a kind. At 255a-b, he suggests that the nature of Motion is Motion and Rest is Rest. And he also asserts that the nature of Difference is "to be different from another" which is not the nature of other kinds (255e). Several pages later, he explicitly points out the nature of Largeness is the large, Beauty the beautiful, Not-Largeness the not-large, Not-Beauty the not-beautiful, and eventually Not-Being the not-being (258b-c). Therefore, in the text, the Stranger presents the ontological structure of kinds. Each kind includes at least two main layers, the essential one which is the nature of a kind and appears to be a self-predication of this kind, and a subordinate one (my term) which is not inherently owned by the kind but acquired through combination with others. And this ontological structure of kind or Form, obviously, is never clarified and provided in Plato's previous dialogues and the first model of change and motion.

Next, how can this structure of kind, as well as the discussion of Difference, help to solve the Stranger's original puzzle? This becomes evident in the Stranger's ensuing argument of the combination relationship among the five most important kinds by taking Motion as an example. He argues that Motion is both Rest and not Rest (255e; 256b)[212]; both Being and not Being (256a; 256d); both Sameness and not Sameness (256a); both Difference and not Difference (256c).

This format instantly reminds us of the Stranger's primary and failed attempt to deal with the mutable being which we just discussed: Being encompasses both the movable and unmovable things (249d). At that place, the Stranger highlights that this view is no more than reiterating the unsuccessful idea that "everything is hot and cold" which is held by the early philosophers (250a). The Stranger criticized that any proposition in the form of "*x* is both *F* and not-*F*" has to face the following difficulties: If so, *F* would be identical with not-*F* (243e-244a); and further, if *x* is understood as something other than *F* and not-*F*, it must be neither *F* nor not-*F*, but what is not *F* has to be not-*F* and vice versa (250c-d). And we have analyzed that this is because in the meantime "*x* is *F*" can only mean "*x* is identical with *F*".

Therefore, according to the Stranger's previous arguments, it appears implausible for Motion or other kinds to be both *F* and not-*F*. So how could this proposition suddenly become legitimate at 255e-256d? The critical reason is expounded upon in the following text:

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[212] Though Theaetetus denies that Motion can blend with Rest in the previous discussion (252d) here after a dialectical progress this combination is possible. The puzzle about the combination of Motion and Rest, cf. Reeve, 1985: 47-49.

> "We have to agree without any qualms that Motion is the same and not the same. When we say that it's the same and not the same, we aren't speaking the same way. When we say it's the same, that's because it shares in the same in relation to itself. But when we say it's not the same, that's because of its association with Difference. Because of its association with Difference, Motion is separated from Sameness, and so becomes not it but different. So that it's right to say that it's not the same." (256a-b)

Thus, thanks to the Stranger's new analysis of the ontological structure of kind, we are currently able to posit that Motion is both the same and not the same. For it is same and not same in different levels. As we have just analyzed, every kind has two main layers, the nature layer which represents the self-predication of the kind, and the subordinate layer which contains the properties acquired through associating with other kinds. And according to this text, "Motion is same" because itself always remains the same with itself. So it is clear that because the nature of Motion is motion, then it is by nature combined with the Sameness. At the same time, Motion is different not because of its own nature, but due to its association with Difference when being compared with other kinds—as the Stranger claims, Difference is always in relation to another (255d). Therefore, the layered structure of a kind allows it to become both *F* and not-*F* so long as these two opposite properties reside on different levels or aspects.

This is further reinforced by the cases of Motion's combinations with other kinds. Motion is not Rest because it is different from Rest by its association with Difference when being compared with Rest (255e). But at the same time, Motion itself can partake in Rest (256b), for its nature is always Motion and never changes. Similarly, Motion can combine with Being because of its nature (256a).[213] While it also is not because it is different from Being by participating in Difference (256d-e).

In summation, we have attained a comprehensive understanding of the ontological structure of a Kind or Form. It encompasses two distinct levels. The essential one is the nature of this kind and invariably presents as its self-prediction. For instance, the nature of Motion is motion and Sameness is sameness. And the other one is subordinate and it contains properties which do not inherently exist in the kind but are acquired through combination. These properties could be further divided into two sorts: some properties are acquired because of the kind itself or its nature; the others because of the kind's relationship with other kinds. Take Motion as an example again:

Motion	
level	**property**
nature	motion

[213] Although here the Stranger does not directly say "Motion is" because of its nature, this is quite self-evident in the text. At 258a, he says that "the nature of Difference appeared as being one of Beings". And later he also asserts that since What-is-not always is not, it has not-being as its own nature and hence is one kind of Beings (258b-c). So it is natural that "Motion is" also due to its self-predictive essence.

subordination	because of its nature	sameness rest being
	because of its relationship to others	difference

This structure elucidated above is notably absent in the early philosophers' doctrines, and even never clarified in Plato's middle dialogues. Yet it is the very key to solving their difficulty. Indeed, it suggests a resolution to the Friends of Form's puzzle of the mutable being. As we have seen, their difficulty is two-fold. On the one hand, the soul itself should be able to move, while at the same time as a Being it ought to always remain the same. On the other hand, the Forms, as what is grasped in the cognitive activity, should both be moved during the process of the soul's cognition and motionless as the object of Intellect (248d-249c). In the meantime, the new structure of kind seems to help us respond to this double dilemma.

The reason for both the Intellect and the Forms to be able to remain stable and be the same during their motions, then, is that their nature never changes in these processes.[214] For instance, the nature of the Form *F*-ness is always *F*. And when it is acted upon when being known by the soul, it does not alter its own nature and not move inherently, but only moves in its relation with the soul and merely acquires the property motion at the

[214] Similarly, Bluck, 1975: 106.

level of subordination by combining with the Motion. It is the same for the participation, another sort of motion of Forms mentioned by the interlocutors. When the Form *F*-ness participates in another Form (say, *G*-ness) and undergoes some motion in this process (say, *F*-ness comes to be *G*), it only shares in the Form Motion at the level "because of its relationship to others", but the nature of *F*-ness always remains to be the same.

In this way, Beings can change. And this further helps to satisfy the Stranger's original target to argue against the Parmenidean principle by proving that "What-is-not is" and "What-is is not". Indeed, we have already seen that the case of Motion is an example of "What-is-not is". The Stranger then turns to figure out the more general and complete interpretation of "What-is-not is". He first emphasizes the essence of What-is-not, positing that What-is-not refers to the kinds that are able to differentiate from Being by partaking in the "Difference" (256e). Then, due to this participation of "Difference", What-is-not does not signify an extreme opposite of Being—namely, non-existence—but indicates something different from Being (257b-c). Thus, these What-is-not's are still able to be shared in Being. At the same time, though they only "are" by associating with Being, those What-is-not's have their own inherent and self-predicative nature. The nature of Largeness is large, the Beauty is beautiful, so the nature of What-is-not is not being (258b-c). Given their intrinsic nature, those What-is-not's consistently retain being the same as themselves. And when they participate in Being and "are", they only acquire "being" at the level of subordination, and during this process their nature of not being remains unchanged. The Stranger claims that "What-is-not also was and is not being, and is one form among the many

What-is" (258c). Thus, "What-is-not is" is justified, successfully refuting the Parmenidean principle. This view may seem to be trivial to the contemporary eye. However, as we have argued in the first chapter, during Plato's era, this principle was so powerful that it was not only obeyed by the Eleatic scholars but also by Anaximander, Empedocles and many other philosophers. Therefore, Plato's endeavour to overturn the Parmenidean principle is undoubtedly groundbreaking and revolutionary in the early fourth century BC.

In summary, the keystone for overturning the Parmenidean principle lies in a profound re-examination of the core concept "Being". As articulated by the Stranger, "What-is indisputably is not millions of things, and all of the others together, and also each of them, are in many ways and also are not in many ways" (259b). In essence, What-is is not a general genus or entity encompassing various things, but merely a kind in which many others—as What-is-not—participate. So What-is-not is. And this understanding is based on Plato's new analysis of Being's ontological structure. Without this layered structure, each kind would contravene the Law of non-contradiction, being compelled to embody both *F* and not-*F* (such as Being and not-Being, Motion and Rest, Same and Different, etc.) On the contrary, now the Stranger clarifies that the kind can be *F* and not-*F* at different levels, allowing even Motion to combine with Rest.

How, then, does this theory undermine Plato's first model of change and motion? As we have consistently posited, according to this model, Plato's theory of change and motion is founded on Parmenidean principle of What-is. He accepts Parmenides' doctrine of What-is as a precise description of Form, viz. that it always is and never changes. And at the

same time, the Parmenidean principle also provides the foundation for his understanding of the generative character of change. Plato, then, considers the Form as the reason for the mechanism of generative change, which vouches for the legitimacy of non-generative motion which is irrelevant to the participation of a Form. But now, with Parmenides' fundamental principle of What-is overturned, the Forms are not only able to move, they can even come to be their opposite. Additionally, the Forms or Kinds are proven to be able to participate in each other due to their layered structure. So to participate in a Form does not necessarily result in a generative change.

And evidently, Plato does not confine this novel explanation and mechanism to the five most important kinds discussed above. Towards the end of this discussion, the Stranger suggests that this new theory is equally applicable to all kinds. For instance, he claims that What-is is What-is-not because it is not "an indefinite number" of others, rather than merely other four most important kinds (257a). Furthermore, he also enumerates the Beautiful and the not-Beautiful, the Large and the not-Large, the Just and the not-Just as forms of What-is and What-is-not (257d-258c). In this way, not only the five most important kinds but also all other kinds are capable of breaking Parmenides' prohibition that What-is cannot be What-is-not (258c-e). Consequently, all these kinds, akin to the five most important kinds, are able to change by participating in each other, without undergoing any generation. Therefore, the first model's interpretation of change and motion is no longer tenable. And the Stranger's original puzzle regarding how Beings can avoid undergoing generative changes when they are affected or known (248b-e).

4. Philosophical Results of Plato's Reflections

Therefore, at the end of this three-dialogue dialectical progress, in the meantime, Plato's first model of change and motion inevitably collapses. But the analyses and arguments within these dialogues are not exclusively negative, instead, they also hint at the potential path towards Plato's subsequent systematical interpretation of change and motion.

First, the flux phenomena. Though in these dialogues Plato undermines his first model, he never denies the empirical phenomena of flux which the first model seeks to interpret. Namely, he does not negate the experience that sensible things are always in flux, oscillating between opposites. As we have discussed, in the *Theaetetus* the interlocutors merely dismiss the stricter Heraclitean Flux—a doctrine which extremely negates stability, compelling the sensible to change ceaselessly and undergo generations. However, they still leave the room to the primary flux to some extent. And further, given that in the *Theaetetus* and the *Parmenides* the scope of Form has been seriously narrowed, now the Forms can no longer cover all changes between opposites. So it suggests that there are many changes between opposites of the sensible which may not result from participation in the Forms, and hence they may not be generative. If so, even though the sensible particulars are always changing, they do not necessarily alter generatively as proposed in the first model. And in the next chapter, these changes are further clarified as disorderly motion resulting from the inherent nature and necessity of the sensible.

Second and relatedly, the nature of the sensible. In the *Sophist*, Plato argues that the Form has several layers including the nature and the

subordination. This structure, so far as we have seen, is never clarified in his previous works. Ìn this way, the Form is able to keep its identity during its change so long as its nature remains the same. This raises the question: How about the sensible particulars? Do they also have their own nature? Plato does not explicitly apply this novel analysis to the interpretation of the sensible in this dialogue. But the nature of the sensible will be a central issue that Plato intends to deal with in his subsequent understanding of change and motion represented in later dialogues.

Third, the real Form and generation. And moreover, based on Plato's current analysis, there should not exist any negative and sensible Forms. At the same time, it is demonstrated that participating in a Form does not necessarily result in a generation. Nevertheless, these premises do not negate that a real generation is caused by sharing in a real Form. In the following dialogues, Plato will show the refined relationship between the real Form and real generation. The essence of generation, as well as the process of generation under the effect of Form, will eventually be elucidated.

And last, soul and the cause of motion. In the first model, Plato asserts that Form is the reason for generative changes, and at the same time, he also claims that the soul is the cause of all motions. But he never clarifies the relationship between these two mechanisms of change and motion. This relationship, indeed, may be hardly interpreted under the framework of the first model. For all changes between opposites are said to be caused by the Form, but many of them—such as the hot wind becoming cold—seem to be irrelevant to the work of the soul. Now, given that the

previous views concerning the scope of Form and the mechanism of change have been challenged, Plato is going to provide a new perspective, finally unveiling the soul's ultimate role in generations.

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

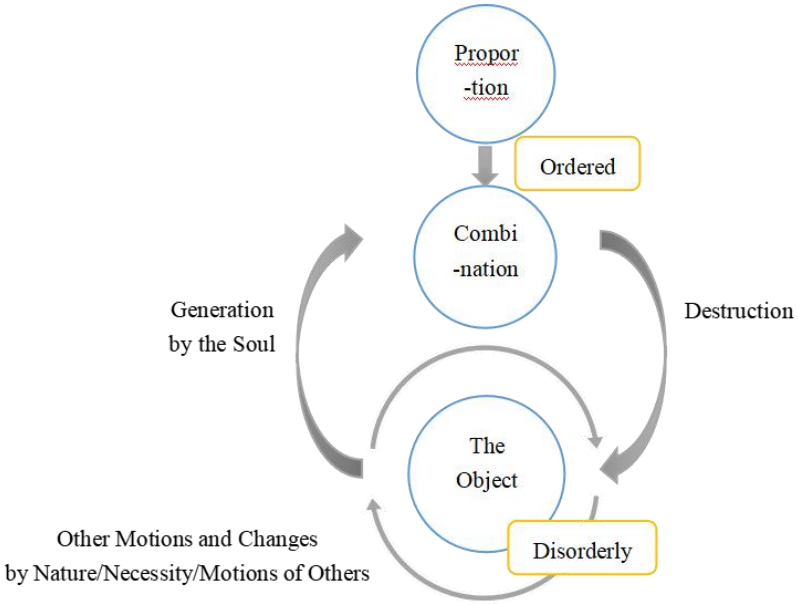
to be a sufficient condition of generation, Plato does not refute the possibility that such sort of participation might be a necessary condition of generation. Additionally, the introduction of the concept of "nature", in turn, also could significantly contribute to his analysis of change and motion. 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

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[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]

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[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,

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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

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[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)

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[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

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[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.

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[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

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[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]

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[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:

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[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

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[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.

Conclusion

We have now reached the culmination of Plato's philosophical journey, affording us an overview of his dialectical comprehension of change and motion within its philosophical milieu.

As previously argued, it is imperative to situate Plato's inquiry within the philosophical landscape of his era. The pre-Socratic philosophers presented diverse and competitive theories and perspectives on change and motion, which likely exerted a profound influence on Plato and his contemporaries. Three particular aspects merit our attention in this study. Firstly, the early Ionian philosophers, Anaximander and Anaximenes, introduced the pattern of change between opposites. Heraclitus subsequently generalized this notion as a universal principle governing all phenomena. From his viewpoint, everything in the world undergoes perpetual flux, constantly oscillating between opposites. Secondly, there exists a prominent tradition in ancient Greek philosophy advocating the perpetual motion of the immortal soul, as well as the gods, and their ability to initiate others' motions. Thirdly, in contrast to these perspectives, Parmenides and his Eleatic followers asserted that What-is always is, undergoing no change, because any alteration or motion of it would be generative. Consequently, they advocated the immutability of What-is. All of these three viewpoints find echoes in some of Plato's works. He unequivocally acknowledges the fundamental pattern of change between opposites and agrees that the soul is the prime mover that initiates motion in others. Additionally, Parmenides' principle of What-is serves as the foundation for Plato's examination of the unchangeable

Form and generative change. However, it becomes apparent that these three insights are not entirely compatible with each other. Following Parmenides' viewpoint would render it challenging to reconcile the phenomena of change in the world. The Pluralists, such as Anaxagoras and Empedocles, formulated their own narratives to address this challenge. Plato, similarly, required a systematic and coherent theory to integrate these insights, thereby avoiding potential conflicts between them.

Plato's first theory of change and motion, constituting his primary attempt to address this objective, gradually emerges in his middle dialogues such as the *Cratylus*, *Symposium*, *Phaedo*, *Republic* and the *Phaedrus*. In these dialogues, he aligns with the Ionian philosophers and Heraclitus, considering change between opposites as the fundamental pattern of alteration for sensible entities. Moreover, he embraces the Eleatic perspective that such changes are inherently generative. Plato introduces the Form to elucidate both the mechanism of change between opposites and its generative nature. Namely, according to this model, a sensible entity comes to be *F* if and only if it participates in a corresponding Form *F*-ness. Thus, the Form functions as the cause of the sensible entities' change between opposites. Further, since such a process of participation is the essential premise for an entity to undergo a generative change, it indicates that certain motions, such as spatial motion and the motion of the soul, can be non-generative as they are irrelevant to a Form. Consequently, this model allows spatial motion and the motion of the soul to be non-generative, ensuring the perpetual motion of the immortal soul and its ability to initiate motion in others.

The first model, while innovative and imaginative, proves flawed, as evidenced in Plato's *Theaetetus*, *Parmenides* and *Sophist*. As we have contended, two pillars of this model are severely weakened in these dialogues. Firstly, doubts arise regarding the role of the Form in the mechanism of change. Plato intimates within these dialogues that the conception of the Form presented in his middle dialogues may fail to encompass all varieties of change between opposites. Because upon closer scrutiny, Plato argues that negative Forms and sensible Forms should not exist. Moreover, Plato demonstrates that participation in a Form does not inevitably lead to generation. For example, a Kind can combine with other Kinds and undergo some form of motion without undergoing generation. Additionally, Plato compellingly argues that all types of change and motion are generative if Parmenides' principle is strictly adhered to. Consequently, explaining the motion of entities such as the soul, life, and even the Form becomes challenging. Secondly, the Parmenidean principle, which elucidates the generative nature of change, is deemed untenable, as the Form is argued to be both *F* and not-*F*. Therefore, Plato's theory of change and motion can no longer be founded on the Parmenidean principle, and its mechanism should not rely on the participation of the Form.

Thus, in the *Statesman*, *Philebus*, *Timaeus*, and the *Laws* X, Plato advocates his second model of change and motion. Under this framework, he emphasizes that sensible entities possess an inherent capacity to move and change. This motion, including oscillation between opposites and irregular spatial motion, is intrinsic rather than caused by external forces, as posited by the initial model. Consequently, these changes are not considered generative processes of motion. Instead, according to Plato's

new narrative, generation occurs only when an order or mathematical proportion is introduced into the disorganized sensible object. This process ends the inherent disordered motion of the object, transforming it into something ordered and good. Furthermore, the ultimate cause of generation is attributed to the soul. Accordingly, Plato provides a comprehensive depiction of change and motion in the universe. The world is in a perpetual state of flux, with all sensible and visible phenomena constantly changing and moving, influenced by both inherent and external forces. It is the soul, including the gods, that introduces order and facilitates generation in the sensible world. Thus, Plato concludes his exploration of change and motion by asserting that the universe, though characterized by flux, is not random or disordered. Rather, it is carefully guided by nous or intellectual power, as elucidated in the *Phaedo*.

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