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SOCRATIC DUNAMEIS: A TAPESTRY OF MANY THREADS

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degree of

DOCTOR OF PHILOSOPHY

Ву

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SOCRATIC DUNAMEIS: A TAPESTRY OF MANY THREADS

A Dissertation APPROVED FOR THE DEPARTMENT OF PHILOSOPHY

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Στὸν ἀδελφὸν μου, Φὼτης Παλαιολὸγος

To my brother,

Fotis Palaiologos

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Ithaca

When you set out on your journey to Ithaca, pray that the road is long, full of adventure, full of knowledge.

The Lestrygonians and the Cyclops, the angry Poseidon -- do not fear them:

You will never find such as these on your path, if your thoughts remain lofty, if a fine emotion touches your spirit and your body.

The Lestrygonians and the Cyclops, the fierce Poseidon you will never encounter, if you do not carry them within your soul, if your soul does not set them up before you.

Pray that the road is long.

That the summer mornings are many, when, with such pleasure, with such joy you will enter ports seen for the first time; stop at Phoenician markets, and purchase fine merchandise, mother-of-pearl and coral, amber and ebony, and sensual perfumes of all kinds, as many sensual perfumes as you can; visit many Egyptian cities, to learn and learn from scholars.

Always keep Ithaca in your mind.
To arrive there is your ultimate goal.
But do not hurry the voyage at all.
It is better to let it last for many years;
and to anchor at the island when you are old,
rich with all you have gained on the way,
not expecting that Ithaca will offer you riches.

Ithaca has given you the beautiful voyage.
Without her you would have never set out on the road.
She has nothing more to give you.

And if you find her poor, Ithaca has not deceived you. Wise as you have become, with so much experience, you must already have understood what Ithacas mean.

Constantine P. Cavafy (1911)

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ABSTRACT

In the early Platonic dialogues Socrates uses the concept of *dunamis*, which is commonly translated as 'capacity', 'power', 'ability', or 'potentiality', in connection with his search for true knowledge of morality. He ascribes it to inanimate, rational and non-rational animate substances, intelligible entities and abstract ideas. No matter how often the philosopher uses the term, he does not develop a model for it. In this dissertation, then, I argue that the Socratic assumptions concerning *dunamis* rely for the most part on what the philosophic tradition before Socrates had established. Like his predecessors, the early natural philosophers, Socrates understands *dunamis* to be a property of animate and inanimate objects that merely signifies the capacity to change or cause change, but he fails to explain the nature of the interaction between *dunamis*, basically an immaterial entity, and a material animate or inanimate object. His focus merely on human *dunameis* shows that a *dunamis* is related to a particular activity of a specific object with a specific nature, it is manifested under specific circumstances, and difference in the object is a necessary and sufficient condition for difference in the *dunamis*.

INTRODUCTION

This is an experience which is characteristic of a philosopher, this wondering (*thaumazein*): this is where philosophy begins and nowhere else. (Plato, *Theaetetus*, 155d2-4)

The initial premise of this project was conceived during a discussion with Professor Hugh Benson. At the time I was looking for a dissertation topic and Professor Benson was working on his book titled *Socratic Wisdom*. The wondering, to use Plato's terminology, was over the philosophical significance of *dunamis* in Socrates' claims regarding knowledge and morality. Socrates uses *dunamis* to refer to a property of humans *qua* humans, of inanimate objects and of abstract ideas such as knowledge, *techne*, etc. No matter how often he uses the term, he does not discuss it in detail for reasons about which one can only speculate. Perhaps Socrates did not have all the different nuances the term entails as pointed out later by Aristotle; afterall, the Greek language was still developing philosophically. Or for what is worth, he might have intended to elaborate on *dunamis*, but caught up in the elenctic arguments in search of true knowledge of morality, he did not. However, every time he uses the term, he appears to know what it means.

Understanding Socrates' claims on *dunamis* will help to understand his intellectualist approach to virtue and address more efficiently a possible model of Socratic epistemology. Given that Socrates does not discuss *dunamis* exclusively, one way to decipher his claims is to look into the applications of the term in the philosophic literature that existed before and during his time. Clearly, Socrates' philosophy is the product of the political and cultural circumstances in Athens; hence it only makes sense when dealing with ambiguous terms in his philosophical system to seek the help of those elements.

The investigation of the philosophic literature that was present before and during Socrates' time poses one serious limitation. Specifically, the evidence that has come down to us from the works of the Presocratic philosophers is fragmentary. This alone makes forming a definitive idea of their use of *dunamis* rather impossible. To overcome this obstacle, I consult the Aristotelian, in many respects, inclusive model of *dunamis*. By Aristotle's own admission, some of the features of his model were present in the accounts of his predecessors. The goal is to provide a much sought for insight to the obscure uses of the Presocratic and Socratic model. At the same time, I draw the similarities and also address the weaknesses of their accounts that prompted Aristotle's comprehensive response.

To efficiently discuss the above topics, I divide this project into four inter-related chapters. In the first chapter, I introduce and establish the various facts that I will be assuming throughout the work. After a short presentation on the literary sources, I start with the beginnings of philosophy and the philosophical community before and during Socrates' time in Greece fifth century B.C. In the brief account of the philosophic culture, besides the early philosophers, I also include the "forerunners", Homer and Hesiod, whose works, though mythical and not clearly philosophical, constitute the prelude to an explanation of the world that began with Thales. I continue with an exposition of the cultural and political situation in Socrates' birth city, Athens, that undoubtedly influenced his philosophical pursuits. The above statements, of course, can be coherent only if Socrates existed as a philosopher as well. Hence, for the remainder of this chapter, I address in some detail what has been dubbed in the literature as the 'Socratic Problem'; namely, whether Socrates is a literary fiction or the real philosopher. Since it is not my intention to critically evaluate this

tension, it suffices for the purposes of this work to side with one part of the literature acknowledging its shortcomings. Hence, I am in agreement for the most part with the arguments for the existence of Socrates as a philosopher as Plato reconstructs his views in the early dialogues. Finally, I conclude this chapter by looking into Socrates' intellectual upbringing and his alleged teachers using for the most part Plato's testimony.

In the second chapter, I give a sample of the various applications of *dunamis* found in the different branches of ancient Greek literature. Next I delve into an etymological analysis of the term *dunamis*, as well as the semantics of the various derivatives. This analysis yields two important features of *dunamis*, one as a capacity and the other as potentiality. As I explain subsequently, these two paradigms, according to Aristotle, are focally related. I end this section by looking into the question why the ancient philosophers should and did address the concept of *dunamis*.

In the third chapter, I investigate the dynamic conception of the world in the early philosophic writings. In this chapter, I do not intend to provide a thorough investigation of the Presocratic treatment of the concept, mainly because any such project is crippled by the mere fact that what is left of the Presocratic works is fragmentary and testimonial. *Dunamis* as used by the early philosophers, is merely instrumental to their accounts of rationally explaining the world. I argue that the early philosophers along with the two mythologists, Homer and Hesiod have implicitly or explicitly stated the following regarding the concept of *dunamis*: D1. the distinction of being between its function (*ergon*) and its *dunamis*; D2. the distinction between rational and non-rational *dunameis*; D3. the fundamental feature of *dunamis* as the capacity to change, move and cause change; D4. the fundamental feature of

dunamis as the potentiality to be or become something; **D5.** the relation between capacity and potentiality is that something is potentially capable to be or become something.

In the fourth chapter, I investigate Socrates' take on dunamis and its role in the early dialogues. To show how dunamis fits in Socrates's search for moral truth, I first discuss his philosophic agenda. A brief exposition shows that the role of *dunamis* is secondary to his investigation of the principles that govern an ethical life. Since his primary concern is morality, investigation on secondary concepts, instrumental to drawing the picture of morality, would be either limited or redundant. Hence, in the case of dunamis, Socrates will rely for the most part on what the tradition before him has established. An overview of the dunameis in the Socratic universe reveals that like his predecessors: a. Socrates ascribes dunameis to animate and inanimate substances, to intelligible entities and abstract ideas; b. it is implicit in his statements that his *dunameis* are immaterial entities that merely signify the capacity to change or cause change; c. he fails to explain the nature of the interaction between dunamis, an immaterial entity, and a material animate or inanimate substance. His focus mostly on the human dunameis yielded the following criteria: 1. A dunamis is related to a particular activity of a specific substance with a specific nature; 2. it is manifested under specific circumstances; 3. two dunameis can be related to two distinct objects only to be differentiated by some kind of relation they each have to the specific object.

In the fifth and final chapter of this project I draw the conclusions. I revisit the thesis of this project which is to primarily discuss the concept of *dunamis* in the early Platonic dialogues. I address how the historical and technical part of this project, the first and second chapters respectively, help us understand the philosophical issues discussed in the third and

fourth chapters. Next I provide a brief overview of the goals and theses that were argued in each chapter. Finally, I discuss the contributions of my project to the Socratic literature.

CHAPTER 1

Dunamis: The Phenomenon

1.1 Introduction

Anthropologically and linguistically, Copi observes, when a culture is concerned "with a given phenomenon, [that] is reflected in the vocabulary of that culture." The Hopi Indians, for instance, assign different words to slightly different kinds of clouds; the same practice we find in the Eskimo culture for snow.

In the ancient Greek philosophical culture, with the appearance of the first accounts that rationally explain the *kosmos*, *dunamis* also makes its appearance in the vocabulary of that culture. It has been understood as 'capacity', 'ability', 'power', 'possibility' and 'potentiality' without any clear distinction how all these terms may relate to each other until Aristotle's time. With the beginnings of philosophy, *dunamis* makes its shadowy appearance in the accounts of the early cosmologists, merely denoting the ability to do something. It continues its ascent in the philosophy of Socrates keeping its original meaning and expanding its range to encompass some rather obscure uses such as "knowledge is *dunamis*". Plato prepares it for its center stage look when he clearly makes *dunamis* one of the essential characteristics of being. He realizes that a proper explanation of any form of change in the physical objects would have to include active and passive *dunameis*. Still, his account fails

¹Copi, I.M. "Essence and Accident". In *Aristotle: A Collection of Critical Essays*. Edited by Moravcsik, J.M.E. London: MacMillan, 1968, p. 155.

²This use, though obscure, is quite essential to deciphering Socratic 'intellectualism'. For more on the Socratic uses of *dunamis* see chapter 4.

to capture an essential feature of *dunamis* which is the ability to be. Aristotle recognizes that the inability of his predecessors to elaborately discuss this essential sense of *dunamis* comes from having ignored the important distinction between being as potentiality (*dunamei*) and being as actuality (*energeia*, *entelecheia*). This distinction constitutes the backbone of Aristotle's theory of *dunamis*. The value of the contribution of the above thinkers to Aristotle's views has not gone unnoticed. When it comes to his theory of *dunamis*, it is clear not only by his own admission but by the textual evidence from his predecessors that the background assumptions on the concept of *dunamis* consist of what the philosophic tradition had already tacitly or explicitly assumed about *dunamis*.

This rough sketch of the presence of *dunamis* in the major philosophical systems at work in ancient Greece fifth century B.C. is to be treated only as a prelude of what is to follow. Specifically, what I intend to do for the remainder of this dissertation is to elaborately discuss the concept of *dunamis*, its features and role in the cosmological systems of the early philosophers as well as in Socrates' quest for true knowledge of morality. The significance of this undertaking is threefold. First, by drawing attention to the works of the early philosophers, the reader will get a glimpse of how the term has originally been used and evolved philosophically. Secondly, this exposition will provide an insight into the background of the Socratic assumptions and uses of *dunamis*; this will be quite instrumental especially when addressing Socrates' "intellectualism" with respect to virtue, namely, that virtue is some kind of knowledge and knowledge is a kind of *dunamis*. Thirdly, this inquiry will also reveal which features of *dunamis* Aristotle's model shares with the above accounts, as well as the limitations of those accounts that prompted Aristotle's detailed response.

Before I proceed with the project, it is important that I make the following remarks. First, upon discussing the Presocratic and Socratic uses of *dunamis*, I do not assume the thinkers had a theory of *dunamis* or they were knowingly advancing one. What they had to say about it at best constitutes the embryonic stages of a theory of *dunamis*. Secondly, I will only refer to texts that the actual word *dunamis* occurs. As I point out in the second chapter, the cognates that derived from the same root as *dunamis* have for the most part the same meaning, namely, the ability to do something. As for the mathematical and adverbial use of the term I will only mention them in passing.

Further, with respect to the investigation on the concept of *dunamis* before Socrates, I limit it only to the philosophical community acknowledging that I might be ignoring further uses possibly instrumental to understanding the philosophical repercussions on the Socratic model of *dunamis*. To make use of all the ancient Greek literature, no matter how valuable that might prove to be, would require an inexhaustible amount of time that would go beyond the scope of this project. In all fairness, though, when the occasion arises, I will make extensive use of specific branches that lie outside the philosophic literature such as epic poetry, tragedy or comedy. In regards with the views and opinions of the early philosophers, I can only claim approximation, since their work is either fragmentary or testimonial which makes any interpretation open to uncertainty. Finally, it is my ultimate aim to understand these thinkers and their philosophies within their historical and cultural time frame.

With this much said, I will now turn to the project. The goal of this chapter is to introduce the protagonists and the cultural milieu that harbored their philosophical quest.

Athens, in a span of two centuries witnessed dramatic changes in the areas of economy,

political affairs, art and literature. Meanwhile, philosophically, the ancient Greeks of sixth and fifth century B.C. would evidence the transition from *mythos* to *logos*. Philosophic explanation reflects the blend between the mythopoetic elements and rational thinking. By the time Socrates expounds his philosophy the process of de-mythologizing originating with the early natural philosophers was under way. In a sense, Socrates was found at the crossroads of two trends: the old mythopoetic tradition, with which in essence Greek wisdom used to be identified, giving its place to the argumentative, self-critical and explanatory movement.

In the course of this exposition, I will discuss the crude beginnings of philosophy and its early representatives. Next, I will address the political and cultural factors that played the pivotal role in Socrates' philosophical views. Finally, I will discuss the man himself and the controversy surrounding his existence as a philosopher. For the most part, the answers to these questions come from studying the original sources, what has come down to us since antiquity. Hence, it is worth digressing momentarily to address the literary sources, and what it is that modern scholarship is faced with when it comes to ancient literature.

1.2 Sources: How Did the Ancients Reach Us?

When we read the works of modern authors, rarely do we have trouble obtaining a complete and accurate text as well as reliable editions. Even though secondary literature aids our understanding of the primary text, still we are able to judge its worth and critically evaluate it on its own merits. The scenario, though, is quite different with ancient authors.

Classical Greek literature has been the product of various historical events stretching

over thousands of years in which many significant, political and cultural factors have been at work. Several internal and external developments within the society would be reflected upon politics, or any form of art or literature.³

Written records of the dramatic changes that took place in the Greek society are dated as far back as the eighth century B.C., mainly because it was around that time that Greeks were introduced to the alphabetic writing by the Phoenicians. This, of course, does not mean that literature as a form of oral composition began at that time; historical and archaeological evidence shows that during the centuries preceding alphabetic writing, there were various forms of oral composition such as poetry, songs and storytelling. The material of these compositions was designed to be sung or recited in religious festivals or for passing time, and it would express personal sentiments about the lives and adventures of ancestral heroes or the achievements and conflicts of the gods.

The original manuscript of such works was a document handwritten by the author or dictated to a scribe. "Publication" consisted in reproducing several copies of the original by hand and distributing them everywhere. As Plato mentions:

when it has once been written down, every discourse rolls about everywhere reaching indiscriminately those with understanding no less than those who have no business with it, and it doesn't know to whom it should speak and to whom it should not.(*Phaedus* 275e1-5)

Unfortunately, no ancient prototypes have survived. One major factor that contributed

³For an example of this, see my account account of Athens before and during Socrates' life in section 1.5. Also see Phillipson, C. *The Trial of Socrates*. London: Stephens & Sons Ltd, 1928, pp. 1-11. And Lesky's detailed chapter on "The Flowering of the Greek City State". In Lesky, A. *A History of Greek Literature*. Great Britain: Methuen & Co. Ltd, 1966, pp. 241-505.

to the loss of the literary text was the change of the medium of circulating the written works; the roll was replaced by the codex, which was much easier to read. Unavoidably, in that transition some of the original text was either lost or replaced. Also, there was a significant loss of the classical Greek literature with the burning of the Alexandrian Library in 47 B.C. With approximately 700,000 volumes at the time of the destruction, many of the classical texts along with the critical editions of the commentators were lost.⁴

As a result, the works of the ancients have descended to us through copies of copies. Almost always such a transmission guarantees accidents, which become more pronounced with the Greek language changing over the centuries. Each time a text was copied by hand, it was very likely that the writer might have introduced errors depending on the interests, prejudices, approaches and purposes, some of them knowingly, others unbeknownst to him. Further, it was unavoidable that what was destined for the public would either be corrupted or tampered with, since there were no copyright laws for the protection of literary work. One such example would be the works of the tragedians. Lycurgus' attempt to protect them proved unsuccessful due to the improvisations of the actors.

Given the above reasons, any modern rendition of an ancient work is the product of a selective process where the editor will determine which manuscript and suggestions made by scholars is most likely the correct one. The most obvious problem of such a process, though, is that it leaves room for more than one interpretation.

⁴For an extensive account on the transmision of Greek literature and its accidents, see Lesky, Albin, *A History of Greek Literature*, London: Methuen & Co Ltd, 1966; Dover, Kenneth (et al.), *Ancient Greek Literature*, 2nd ed., Oxford, New York: Oxford University Press, 1997.

The situation becomes far worse when it comes to the Presocratic text. Besides two short essays by Gorgias, all of the originals, except for some fragmentary text, and ancient copies of the Presocratic philosophers' works have been destroyed. We know of these thinkers and their philosophies through such preserved fragments that vary from a single word to over fifty lines (i.e. in the Parmenidean poem), or through quotations included in the works of others. Both Plato and Aristotle preserved some of the actual fragments, though at times they mixed them with their own renditions of their views. The Neoplatonist Simplicius delivered more accurate quotations especially from Parmenides, Empedocles, Anaxogoras and Diogenes of Apollonia. And he had a good reason to do so. His commentary on Aristotle's *De Caelo* and *Physics* was set to explain the philosopher's attitude towards his predecessors; thus it was quite important that he used their actual words.

Another source of our knowledge of the Presocratic's views is through testimonia and the doxographical tradition. Doxography, which literally means collections of opinions (doxa), was done different ways. Either each major topic of discussion was considered in separate sections along with the views of the various thinkers within each section; such is the nature of Aetius' *Vetusta Placita* and Theophrastus' book on *Sensation*. Or it was done

⁵Another author who preserved fragments through his work was Plutarch. In his Moral Essays hundreds of quotations have either been expanded or interpolated. The sceptic philosopher and physician, Sextus Empiricus, uses quotations from early passages on cognition and reliability. The theologian Hippolytus' work, Refutation of All Heresies, includes seventy sayings from Heracleitus' philosophy. In his biographical and doxographical notices, Lives of Famous Philosophers, Diogenes Laertius illustrates occasional short quotations. Finally, John Stobaeus used Democritus' fragments found in compendia and handbooks in his Anthologicum.

⁶This book is for the most part extant. According to Diogenes Laertius, Theophrastus also wrote approximately eighteen books of *Physical Opinions* including information from

in the form of biographical doxography, which was primarily a medley of all the opinions of each philosopher along with biographical notes on their lives.

However, all of the above sources are faced with the same question, how accurately the words of the early philosophers have been reported. The authors of the direct quotations need not have seen the original work, since they could get their information from available summaries, compendia or anthologies. Further adulteration of the material could also be due to the fact that it may have come from memory as might have been the case of Plato and Aristotle;⁷ or it might have been construed to fit the context it is part of.

Hence, the reader will have access to the quotation but be left in the dark regarding the reasoning. As Mouraletos' attests:

No other field offers as inviting a challenge to the philosophical imagination, yet in as demanding an environment of evidential and interpretive controls.8

What kind of conclusion is then one to draw? It appears from this brief exposition that any serious investigation of the ancient text is most likely doomed to failure from the onset given the condition of the sources. Granted that the condition of the sources poses a serious problem for accurately analyzing the data, I still believe it is reasonable to assume that the researcher can achieve to some degree an accurate evaluation of an ancient thinker's

Thales to Plato.

⁷Some scholars have expressed their skepticism with the evidence presented not only in Aristotle but Theophrastus as well. See, for instance, Cherniss, H.F. *Aristotle's Criticism of Presocratic Philosophy*. Baltimore, 1935; Furley, D.J., Allen, R.E. (eds.). *Studies in Presocratic Philosophy*. Vol. 1. London: Routledge and K. Paul; New York: Humanities Press, 1970.

⁸Mourelatos, A.P.D. *The Pre-Socratics. A Collection of Critical Essays.* 1st ed. Garden City, N.Y.: Anchor Press, 1974, p. 3.

views. One way it can be done is by comparing the textual evidence from different sources and drawing the possible similarities.

Keeping these in mind, I would like to make a final note on the actual sources of this work. My investigation on the concept of *dunamis* will heavily rely on the textual evidence of the Presocratic philosophers as well as the Platonic and Aristotelian corpus. Since I will be using quotations from the above realms of philosophy very often, to avoid congestion, I will resort to the standard way of citing text. Specifically, the following references are widely used in books and articles on the Presocratics and Platonic philosophy:

In reference to the Presocratics, I will be using the standard edition of the classic work by Diels and Kranz, *Die Fragmente der Vorsokratiker*. Each Presocratic is assigned a number. Namely, the fragments are assigned numbers preceded by the letter "B." So, the number for Heraclitus is 22, the Heracletean fragment 101 is referred to as DK 22B101. Likewise, the testimonia are assigned numbers preceded by the letter "A." Regarding the translations of these fragments, I will be using Freeman's complete translation of the B-sections of the fifth edition of Diels, *Fragmente der Vorsokratiker*. Freeman, K. *Ancilla to the Pre-Socratic Philosophers*. Cambridge, Massachusetts: Harvard University Press, 1983.

As for the Platonic text I will be using *Plato: Complete Works*. Edited, with introduction and notes, by John M. Cooper. Indianopolis, Indiana: Hackett Publishing Company, Inc., 1997. I will mention individually translations other than the ones provided in the above text. The Aristotelian text comes from *The Complete Works of Aristotle*. The revised Oxford translation edited by Jonathan Barnes. 2nd printing. Vol. 1-2. Princeton, New Jersey: Princeton University Press, 1985.

With the discussion on the literary sources in place, I will start my inquiry with the conditions that made ancient Greece the cradle of western philosophy. This exposition is important, for it brings into light what transpired that led to the development of the philosophical views of the early thinkers. In short, it discusses the existent cultures that served as the foundation of the Presocratic philosophy.

1.3 The Beginnings of Greek Philosophy9

Any substantial reference to Greek philosophy, at some point, would have to involve a discussion on the defining characteristics of what is considered philosophical versus non-philosophical thought. One approach is to have the epistemological and ontological questions asked by Plato and Aristotle serve as characteristic of philosophical thought. A different approach would be to consider philosophical the view that focuses on providing a rational explanation ($\lambda \partial \gamma o \nu \delta \iota \delta \partial \nu \alpha \iota$) in place of the mythopoetical explanations of the *kosmos* given merely by Homer and Hesiod.

Besides the various advantages, both positions share some rather serious shortcomings. The first one marginalizes specific schools of thought such as the Milesians whose contributions are largely in natural science. The second approach has the spotlight fall only on specific individuals, while dismissing others; for instance, the Pythagorean system, that gained its founder the label of the "obscure" philosopher, allows for mysticism

⁹In this section I do not intend to embark on the question, which peoples, in general, originated philosophy. According to Diogenes Laertius (I.i-ii), some among the Greeks assigned the origins of philosophy to foreign peoples while others insisted it was of Greek origin. Rather, I am interested in the features that distinguish ancient Greek philosophy from other allegedly pre-existing philosophical systems.

that goes beyond what one would expect from a rational explanation.

To avoid such disparities modern scholarship offers a third avenue. Instead of trying to come up with criteria to distinguish the philosophic from the non-philosophic, they see Greek philosophy emerging gradually. De-personifying or de-mythologizing becomes the result of a continuous process of gradual transitions, where originality came through innovation of the 'Greek Miracle', of Greek philosophy being borne ex nihilo, has become obsolete. Views such as Burnet's that Greeks "were born observers", or Heath's credit of the success of the Greeks to their being "a natural race of thinkers" have been abandoned. Rather, the deciding factor of this gradual emergence has been the adoption of rational discourse over mythopoiesis. Naturally, the question to ask is what prompted such a course of action, so that the works of Homer and Hesiod, with which the ancient Greeks grew up, were abandoned as popular mythoi. Several factors had been at work. Most of them are exemplified in the Ionian Greek city of Miletus, which by most philosophical accounts has been credited with the beginnings of Greek philosophy and science in the dawn of sixth century B.C. 13

¹⁰This view was initially advanced by Cornford, F.M. *Principium Sapientiae: The Origins of Greek Philosophical Thought*. Cambridge, England: Cambridge University Press, 1952. Subscribers to this approach are Lloyd, G.E.R. *Magic, Reason, and Experience*. Cambridge, New York: Cambridge University Press, 1979; West, M.L. *Early Greek Philosophy and the Orient*. Oxford: Clarendon Press, 1971.

¹¹Burnet, J. Greek Philosophy. Part I: Thales to Plato. London: McMillan, 1928, p.8.

¹²Heath, T.L. *A History of Greek Mathematics*. Vol. 1. Oxford: The Clarendon Press, 1921, p.6.

¹³Besides Miletus, the city of Thales, Anaximander, and Anaximenes, Samos, Pythagoras' birthplace, Colophon, the native city of Xenophanes, and Ephesus, Heraclitus'

Mainland Greece is a mountainous land and the poverty of its soil forced the inhabitants to navigation, immigration and more importantly to the foundation of new colonies. Miletus, being one of them, is located on the Aegean coast of Asia Minor. As the founder of many colonies, it enjoyed prominence not only because of its commercial relations with other Greek cities but also because of its multi-faceted contact with non-Greek civilizations such as Egypt, Mesopotamia and the Lydians of inland Asia Minor. Being a Greek colony, she shared with the rest of the Greeks the same language, social structure and Homeric culture; the Milesians recognized Homer's poems and the Olympian gods as their own.

Interestingly enough, the Milesians did not espouse blindly what they inherited; rather, they adapted it to meet their own standards. They allowed themselves to get exposed to the culturally foreign elements of such prestigious civilizations as Egypt and Mesopotamia¹⁴, thus establishing a new intellectual tradition. The openness to different

home, were among the Ionian cities that in a span of approximately half a century gave rise to new intellectual tradition.

his account is indicated by his conception that the earth rests on water. (Aristotle, *On the Heavens* 2.13 294a28). The Egyptians conceived the earth as a flat, rimmed dish resting on water. In the Babylonian creation story of Eridu 'all land was sea'; then Marduk built a reedhut on a raft on the surface of the water which became the earth. Herodotus also reports that "the Egyptians were the first to declare this doctrine too, that the human soul is immortal, and each time the body perishes it enters into another animal as it is born. When it has made a circuit of all terrestrial, marine, and winged animals, it once again enters a human body as it is born. Its circuit takes three-thousand years. Some Greeks have adopted this doctrine, some earlier and some later, as if it were peculiar to them. I know their names, but do not write them." (*Histories* 2.123). It is believed the names Herodotus denies to disclose could be the Pythagoreans. Also Plato, several times, has his characters recount stories that show the interconnectedness of Greeks and the above civilizations. See, for example, *Critias* 108e-109a, 113a; *Timaeus* 21bff, 25e. See also Aristotle's reference to Egypt and Babylon

ideologies and the knack of the Milesians for adaptive borrowing were both quite instrumental to expanding their own intellectual horizons. Furthermore, the financial security they enjoyed due to the growing industry, shipping and trade, gave them relative freedom for philosophical speculation and expression. Additionally, the availability of written works did not limit literacy to a certain caste of the population. 16

One would, of course, argue that the above conditions by themselves are not enough to make Miletus the epicenter of the emergence of Greek philosophy. Doubtlessly, they were present in the Babylonians, Egyptians, and Mesopotamians. Indeed, these civilizations shared the same conditions with Miletus, but their accounts lacked the explanatory and systematic, the coherent and argumentative, the self-reflective and the critical.¹⁷ This fact alone does not suffice to explain why philosophy began in Miletus, especially when the above factors were equally found in other Greek cities. What is it, then, that turns the scales in Miletus.

regarding early mathematics and astronomy (Metaphysics I.1. 981b23).

¹⁵As Aristotle correctly observes people engage in speculative thinking when they are not constantly preoccupied with taking care of their practical needs: "when all such inventions were already established, the sciences which did not aim at giving pleasures or at the necessities of life were discovered, and first in places where men first began to have leisure."(*Metaphysics*, 1.1 981b14-25)

¹⁶Other conditions listed are the technological mastery as well as the sociopolitical nature of the *polis*. See Vlastos, G. "Equality and Justice in Early Greek Cosmologies." In *Classical Philology*, vol. 42, 1947, pp. 156-159; Gernet, L. *The Anthropology of Ancient Greece*. Baltimore, MD: Johns Hopkins University Press, 1981, pp. 352-364. Hahn, R. *Anaximander and the Architects: the Contributions of Egyptian and Greek Architectural Technology to the Origins of Greek Philosophy*. Albany, New York: State University of New York Press, 2001, pp. 15-45.

¹⁷Lloyd specifically argues for the last two in Lloyd, G.E.R. *Magic, Reason, and Experience*. Cambridge, New York: Cambridge University Press, 1979, pp. 240-264.

Admittedly, there is not a definitive answer to this question. Perhaps the deciding factor could be that individuals such as Thales, Anaximenes and Anaximander considered to be the originators of Greek philosophy and science were born and flourished in Miletus. They were the first ones, who, as Aristotle points out,

wondered (thaumazein) originally at the obvious difficulties, then advanced little by little and stated difficulties about the greater matters, e.g about the phenomena of the moon and those of the sun and of the stars, and about the genesis of the universe. And a man who is puzzled and wonders thinks himself ignorant (whence even the lover of myth is in a sense a lover of Wisdom, for the myth is composed of wonders); therefore, since they philosophized in order to escape from ignorance, evidently they were pursuing science (episteme) in order to know, and not for a utilitarian end. (Metaphysics 1.2, 982b 11-24)

To summarize, ancient Greek philosophy did not spring *ex nihilo*. It is the product of several adaptations of native and foreign elements to the Greek culture. The uniqueness stands in the kind of philosophy the Greeks practiced and their position within the western tradition of philosophy. Their historical and philosophical narratives epitomize years of gradual transitions of speculative thought, where its main feature was the promotion of the rational over the mythic elements. Seen in this light, one can get a better understanding of how and why the philosophies of Socrates, Plato and Aristotle came about and their interdependence with the past.

The specific groups or individuals 18 that I will be addressing subsequently have

¹⁸Despite the misleading character of the term Presocratics, I will still be using it to refer to the early Greek philosophers. By using the Presocratic label I do not refer to what has been commonly misunderstood a group of thinkers that existed chronologically prior to Socrates; some were Socrates' contemporaries, such as the sophists. Neither do I intend to claim that conceptually they were radically different from the Socratic thought. For instance, Democritus', Socrates' contemporary, views on morality bear striking similarities with the Socratic ones. For more details on the two philosophers, see Kahn, C.H. "Democritus and

decidedly influenced the philosophies of Socrates, Plato and Aristotle. The value of their contributions is clearly pointed out by Aristotle; it is necessary, he says, that we

call to our aid those who have attacked the investigation of being and philosophized about reality before us. For obviously they too speak of certain principles and causes; to go over their views¹⁹, then, will be a profit to the present inquiry, for we shall either find another kind of cause, or be more convinced of the correctness of those which we now maintain. (*Metaphysics*, I.3, 983b1-7)

1.4 Homer, Hesiod, et al.

In many of his treatises, Aristotle credits the early philosophers and the mythologists for their contributions to his philosophy. In one such instance, he pays tribute to those who have paved the way for his own inquiry into the first principles and causes (*Metaphysics* I.3, 981b1-5). Elsewhere, he hints that Hesiod might have been the first thinker to come up with the idea of the "efficient cause":

One might suspect that Hesiod was the first to look for such a thing-or some one else who put love or desire among existing things as a principle, as Parmenides does; And Hesiod says:-

First of all things was chaos made, and then Broad-breasted Earth and love that foremost is Among all the immortals,

which implies that among existing things there must be a cause which will move things and bring them together. (*Metaphysics* I.4, 984b23-30)

the Origins of Moral Philosophy." In *American Journal of Philology*, vol. 106, 1985, pp. 1-31. For more information on the misleading nature of the term Presocratics see *The Cambridge Companion to Early Greek Philosophy* edited by A.A. Long. Cambridge: Cambridge University Press, 1999, pp. 5-10.

¹⁹Indeed, the philosopher would often recapitulate the existing theories before discussing his own view. See *Metaphysics I*, 2, 983b1ff, *Politics I*, 1252a8-22, *Rhetoric I*, 1354a10-20, *Physics I*, 185a1ff.

In effect, it is no accident that Aristotle would find seeds of philosophy in Hesiod, for he has already admitted that "the lover of myth is in a sense a lover of wisdom". ²⁰ Hence it is merely sensical to begin our discussion with the two poets.

Homer's epic poems, the *Odyssey* and the *Iliad*²¹ are the first preserved written records of Greek literature in antiquity. His language in the poems portrays not only a reflection of the world, life, and customs of his time, but reveals the intellectual structure of the Greek mind and the first rudiments of Greek philosophy as well. For instance, a careful reading of the poems will reveal a relation between knowledge and human activity²² for which the poet himself did not express any philosophical concern; centuries later, the nature of this relationship will become the major focus of Socrates' philosophical enterprise.

The first attempts at the systematization of philosophical thought came with Hesiod. In the *Theogony* Hesiod gives his audience and readers an account of the birth of the

²⁰In *Metaphysics* I, chapters 3 and 4 Aristotle also credits Homer on his account on the first cause, see especially 983b29-984a3.

²¹To consider Homer the composer of both the *Odyssey* and the *Iliad* is to consider the **Homeric Question** answered. The literature has long debated whether Homer was the author of both poems or each one was the product of a single author, given the differences of style and compositional techniques in both poems. However, this is not the place to resolve this. It suffices to say that regardless of their actual author, the evidence in those poems provides a rich reflection of the stream of intellectual life and the culmination of a long development of the world of ancients. For a detailed account on the debate, see Lesky pp. 32-41, Dover p. 14.

²²For instance, Mentor when addressing the suitors in the house of Odysseus states "no longer now let one who is a sceptered king be eager to be gentle and kind, be one whose thought is schooled in justice [μηδὲ φρεσὶν αἴσιμα εἰδὼς] (Odyssey II, 231); whereas Apollo describes Achilles as someone who "knows wrath like a lion" (λὲων δ΄ ὡς ἄγρια οἶδεν) (Iliad 24, 39-41). In both cases, the poet uses variations of the same verb which has the meaning of epistamai that means to know well, a verb which is abundantly found in the Platonic writings and has the same meaning.

Olympian gods, though his mythopoetic reasoning and genealogical method are by no means scientific in the modern sense. His explanation of the birth of the *kosmos* and of all the divinities and their powers within it, signals the early stages of cosmology. Speculative but rational in its own way, his account will contribute to the foundation of natural philosophy.²³

The systematization of philosophical thought reaches its culmination much later with the application of a critical, argumentative and non-mythical approach to cosmology and to nature as a whole.²⁴ The Greek of the sixth century B.C., found at the crossroads between the old and the new tradition in the making, would seek explanation either in the form of the rational thought and investigation represented by the Ionian and Eleatic schools or in the practices of the Orphic mysteries²⁵.

The views of these early philosophers had a significant impact on both Plato and

²³For more on the contributions of the mythologists in philosophy see Kirk, G.S., Raven, J.E. and Schofield, M. *The Presocratic Philosophers*. 2nd ed. Cambridge: Cambridge University Press, 1983, pp. 7-74; Barnes, J. *The Presocratic Philosophers*. *Volume 1: Thales to Zeno*. Boston, Mass: Routledge & Kegan Paul, 1979, pp. 3-16.

²⁴Epic poetry continues to be the medium chosen by early philosophers such as Xenophanes, Parmenides, and Empedocles. By the second half of the fifth century, though, it will be replaced by discursive prose as the standard medium of writing philosophy. For more on the subject, see Most, G.W. "The Poetics of Early Greek Philosophy". In *The Cambridge Companion To Early Greek Philosophy* edited by A.A. Long. Cambridge: Cambridge University Press, 1999, pp. 332-362.

²⁵The Thracean Orpheus probably lived in pre-Homeric times. His name became attached to rites and ritual ways and beliefs about reincarnation. By the fifth century B.C. there were many adherents subscribing to his views calling themselves Orphics and Bacchants. Evidence related to the Orphic mysteries and their followers can be found in Euripides' *Hippolytus* 952 and Aristophanes *Frogs*1032. Plato also knew of the Orphic oracles, see: *Cratylus* 400b1-c8, *Republic II* 363c1-e2, *Timaeus* 40d, *Laws* VI 782c1-d. Aristotle, though he did not believe Orpheus actually existed, mentions the 'so-called epic poems of Orpheus' in: *On the Generation of Animals* 734a and *On the Soul* 410b.

Aristotle's thought.²⁶ How much influence their views exerted on both of the philosophers' intellectual development we can only speculate. Throughout the dialogues, Plato shows his general knowledge of the existing Presocratic theories on cosmology.²⁷ He explores some of the questions raised by the two radically different accounts of reality proposed by Heraclitus and Parmenides.²⁸ His metaphysics, although he does not give credit, is deeply infused with ideas that are strongly related to Pythagoreanism. For instance, in the *Phaedo* (95a1ff, 62b3) he presents an eschatological argument about the fate of the soul with ethical and religious connotations directly associated to the Pythagorean doctrines of the immortality of the soul²⁹.

Finally, but not the least important, is the sophistic movement. The earlier use of the term *sophistes* was reserved as a general term for wise men, and up to fourth century B.C.

²⁶He would actually devote one of his treatises, *Physics*, to refute the Parmenidean challenge that there is no change in the cosmos.

²⁷Some times he would quote the philosophers and their theories by name: in *Cratylus* 402a1-8 Socrates, upon discussing with his friend Hermogenes on the correctness of names, quotes Heraclitus and his famous phrase that nothing is at rest and that 'you cannot step in the same river twice'. Also see *Apology* 26d1-8, *Cratylus* 409a1-b2, *Meno* 76c7-10, *Theaetetus* 152d1-e6. Other times he would be less explicit and would refer to them as the "mystics", "more refined intellects", "a certain theory", etc.

²⁸See Heraclitus' claim that there is far more change and instability than the senses actually reveal to us; and Parmenides' argument that motion and change are impossible. Actually, his respect for the latter was of such magnitude that in the *Theaetetus* he has Socrates claim "there is one being whom I respect above all. Parmenides himself is in my eyes, as Homer says, a 'reverend' and 'awful' figure. I met him when I was quite young and he quite elderly, and I thought there was a sort of depth in him that was altogether noble" (183e5-8). See also: *Sophist* 242d1-e2, *Parmenides* 127c1-130d, *Meno* 76c7-8, *Phaedo* 72c1-d2, *Theaetetus* 180e1-4, *Cratylus* 401d3-5.

²⁹Ebert, Theodor. Sokrates als Pythagoreer und die Anamnesis in Platons Phaidon. Akademie der Wissenschaften und der Literatur. Mainz, Stuttgart: Steiner, 1994.

for the philosopher and orator. By the time of Plato, the term was used to refer only to those who taught rhetoric and linguistic relativism.³⁰ Their distinctive contribution was their teaching in oratory, ethics, mnemonics, literature, political theory, law, history, mathematics and astronomy. Some of them expressed also an interest in philosophy, particularly metaphysics and epistemology.

The Sophists produced many books and speeches of which very little has survived. Much of our knowledge of them comes from Plato whose account was rather myopic. In almost all of his dialogues he portrays them harshly. He strongly believed that they were teaching subjects they had not properly understood. Given the general feeling of resentment they had drawn from the philosophic elite it is questionable how much their teachings had influenced any of the above philosophers.³¹

In conclusion, it was within this rich tradition of a blend between mythopoetic elements and rational thinking that Greek thinkers such as Socrates, Plato and Aristotle would produce their ideas. The various fermentations of ideas within the philosophic community comprised only one piece of the mosaic in Athens. In what follows, I will summarize the other pieces that were part of the political and cultural arena of Athens during fifth century B.C.

³⁰For more on the topic see Woodruff, P. "Rhetoric and Relativism: Protagoras and Gorgias". In *The Cambridge Companion To Early Greek Philosophy* edited by A.A. Long. Cambridge: Cambridge University Press, 1999, pp. 290-310.

³¹According to biographical notes, Socrates is said to have studied under one of them, named Prodicus. See the relevant discussion in section 1.8.

1.5 Athens: The Greatest City with the Greatest Reputation

In order to understand the mission, the doctrines and method of investigation of a thinker, it is necessary that we keep in mind the age and place in which he lived and the main events that gave his ideas and philosophy shape. To borrow Zeller's words:

every system, it is true, as being the work of a definite person, may best be studied in the light of the peculiarities, culture, misfortunes and circumstances of its author.³²

Attica and more particularly Athens in a short period of time, between 460 B.C. to 410 B.C., achieved a unique array of prosperity in the realms of art, literature, philosophical and political thought. The Athenian citizens were presented with an abundance of choices for creative pastime. Their philosophical horizons were expanded not only by discussions taking place in the marketplace, but by the published works of thinkers outside Athens. According to Plato the works of the Ionic philosophers were already available to the public and could be purchased in the *agora*³³. On the other hand, those who were interested in formal training in thinking and speaking for public office, or acquiring general education, would seek the help of the sophists who proclaimed expertise on a variety of subjects ranging from music to gymnastics. They traveled from town to town³⁴ and for an appropriate fee Athenians were able to attend a single or a series of lectures designed to teach them practical

³²Zeller, E. *Socrates and the Socratic Schools*. London: Longmans, Green, and Co., 1885, pp. 53.

³³Apology 26d-e, *Phaedo* 97b; also the *Parmenides* where Plato discusses Parmenides' views and their impact in the Athenian way of thinking.

³⁴Protagoras of Abdera, for instance, had visited Athens frequently and befriended Pericles; whereas Gorgias from Leontini Sicily was sent as an embassador to Athens in 427 B.C. where he amazed Athenians for his rhetorical skills.

proficiency in private and public affairs³⁵.

Meanwhile, all citizens, independent of wealth or class, could listen to the serious plots of tragedy³⁶ or the caustic antics of comedy³⁷. Understandably then, Athens in that period was considered "the center and shrine of Greek wisdom" (*Protagoras 337d*). It is no wonder then, why Socrates, despite his notorious criticisms, called her "the greatest city with the greatest reputation for both wisdom and power"(*Apology* 29d).

Yet, the intellectual and political power Athenians enjoyed could not delay the changes brought partly by such prosperity. Their exposure to a wide diversity of cultures and institutions made them increasingly aware of the transient character of human transactions. The inevitable comparisons of the different customs and ways of life (*Herodotus* III, 38) gave rise to self-reflection and criticism. General principles regarding morality and the existing political institutions would come under scrutiny and skepticism would prevail in any attempt of their re-evaluation. In *Gorgias*, Socrates describes the general feeling of unease among the Athenians regarding the morals of the political authorities of their city:

Are the Athenians said to have become better because of Pericles, or, quite to the contrary, are they said to have been corrupted by him? That's what I hear, anyhow, that Pericles made the Athenians idle and cowardly, chatterers and money grubbers, since he was first to institute wages for them. (515e)

³⁵Protagoras 318e, Apology 19e-20a, Meno 91c-e, Hippias Major 282b-d.

³⁶To mention a few of the plays produced by the great ancient tragedians of that period: Aeschylus' *Oresteia* in 458 B.C., Sophocles' *Antigone* in 442 B.C., Euripides' *Alcestis* in 438 B.C. and *Medea* in 431 B.C.

³⁷Aristophanes, the most eminent of his kind, had been very resourceful producing satiric plays for at least twenty years: *Acharnians* in 425 B.C., *Clouds* in 423, *Lysistrata* and *Thesmophoriazusae* in 411 and the *Frogs* in 405, six years before Socrates' trial.

In his autobiographical notes in the *Letters*,³⁸ a seventy year old Plato expressly states his resentment for the existing political establishment and the shameless corruption of the statesmen.³⁹ Religion also had lost its meaning creating overwhelming frustration amongst the people. The anthropomorphic representations of the divine by Homer and Hesiod would not meet their needs anymore. As Xenophanes reflects:

No man knows clearly about the Gods or the universe: even if he speak what is perfectly true, he himself does not know it to be true: all is a matter of opinion.⁴⁰

Finally, the scars created by the Persian and later the Peloponnesian Wars deepened the crisis in both the economical and political arena of Athens. Tyranny took the place of democracy creating fear and intensifying the already existing uncertainty⁴¹.

Amidst this new state of affairs, Socrates, understanding the dangers of relativism pertaining to the mores and any other aspect of life, seizes the opportunity to discuss the criteria of a true knowledge of morality. Having been born by the end of the Persian War with Athens being the major power in Greece, Socrates was fortunate to have spent most of

³⁸According to Diogenes Laertius, Thrasyllus, who originally compiled all thirteen letters to the third edition of Plato's work, alleges that Plato is the writer of the letters. Whether all thirteen are recognized as genuine Platonic works is questionable. The least controversial of them is *Letter* VII. Judging from its content, several scholars consider it the most likely to have been written by Plato. See Kahn, C. *Plato and the Socratic Dialogue*. Cambridge: Cambridge University Press, 1996, pp. 48-49, especially footnote 22.

³⁹See especially *Letter* VII, where he explains of his dreams as a young man to pursue public office and how disillusioned he became in his later years by the establishment.

⁴⁰Fragment 14, p. 51, Karsten (ed.); also in *Republic* I, 330d.

⁴¹Phillipson offers an extensive and poignant discussion in *The Trial of Socrates*. London: Stevens & Sons Ltd, 1928, pp. 1-11; Also see Zeller, E. *Socrates and the Socratic Schools*. London: Longmans, Green & Co.,1885, pp. 1-36.

his youth in a culture that could boast prominence in every sector of life. Understandably, such profound changes would prompt him to vocalize his concerns and seek new resolutions to age long problems. His philosophic instinct, his unique and at times rather controversial approach in philosophical investigation, indeed, reflect the fermentation between the old and the new.

However, these views can only be coherent of an actual historical figure. It would make no sense to be concerned about the historical context of a merely dramatic character. Hence, it is necessary that I address briefly the so-called "Socratic Problem"; namely, whether Socrates, the philosopher, actually existed or his persona was the product of a political and cultural propaganda.

1.6 Socrates: Myth or Reality?⁴²

Historically, it has been established that there was a man named Socrates who was born in Athens in 469 or 470 B.C., ⁴³ lived almost all of his life in Athens, was executed by the state in 399 B.C., and that he himself did not write anything; at least, it is not known whether he actually wrote anything. ⁴⁴ What little we know of his life and work as a

⁴²The primary focus of this section is to discuss Socrates' actual existence as a philosopher rather than a detailed biography of his life as a historical figure. On the other hand, when needed, I will be resorting to the latter especially in the case of comparing the value of various sources.

⁴³For more information on Socrates's dates of birth and death see Zeller, E. *Socrates and the Socratic Schools*. London: Longmans, Green & Co., 1885, p. 54, note 1.

⁴⁴There is a single passage in Epictetus (2.1.32) that suggests Socrates was the author of numerous works. However, it is hardly considered strong evidence, since most of the ancient contemporary and later literati either do not refer to this practice at all or

philosopher comes from secondary literature, the testimony of ancient historians such as Xenophon, and philosophers such as Plato and Aristotle.⁴⁵ Consequently, the only meaningful way to develop an accurate picture of his enigmatic personality as a philosopher is to look for his thoughts in the writings of others.⁴⁶

This brings us to the next important point of this discussion, namely how to treat the evidence from the above reputable writers. All three of them were intrigued by Socrates' personality and either devoted whole works to him or written commentaries about him. However, their perceptions of him differ. For instance, Aristotle, possibly influenced by Plato's testimony, takes particular interest in Socrates' views of virtue, which he partly espouses (*Nicomachean Ethics*, VI, 1144b14-33). His understanding of him as a moral philosopher has helped scholars not only to see one side of Socrates' philosophical expertise

emphatically deny the existence of any writings. See Cicero De Oratione III, 16; Diogenes Laertius I, 16.

other writers' in antiquity. Aristophanes' portrayal of Socrates mainly in the *Clouds* has been described as less instructive than the aforementioned writers, and thus not a serious contender for a reliable biographical source regarding his contribution to philosophy. For a detailed account on the subject matter see Dover, K.J. "Socrates in the *Clouds*" in *The Philosophy of Socrates: A Collection of Critical Essays* edited by Gregory Vlastos. Notre Dame, Ind.: University of Notre Dame Press, 1980, pp. 50-77. Of the same opinion is Burnet, J. *Greek Philosophy, Part I: Thales to Plato*. London: MacMillan & Co., 1928, pp. 144-147. There are also some fragmentary reports of lesser biographical value by Antisthenes, the founder of the Cynic School; Aeschines, a friend of Socrates, who, according to Plato, witnessed Socrates' death (*Phaedo* 59d); and finally, Diogenes Laertius' anecdotal collection: *The Life of Socrates*.

⁴⁶Their evidence may have come either from recollecting their personal encounters with the man, shared material they acquired from sources that might no longer be available, or recreating his life and travails, as it has been suggested for the Socrates of the early Platonic dialogues. Regardless of which scenario applies, still the information needs to be treated cautiously, for historical writing was hardly objective at the time.

but decipher the two diametrically different philosophies appearing in the Platonic corpus under his name.⁴⁷

In contrast, Xenophon had a first hand experience with the philosopher whom he apparently had met three years before he was executed. His version consists in mere reports of personal encounters with Socrates or recollections of his discourses with others (*Memorabilia*, specifically 1.3.1 and 1.4). But his account does not show any of the complex nature of the Socratic philosophical arguments found in Plato.⁴⁸

We get a glimpse of Plato's thoughts about Socrates in the autobiographical *Letter* VII. As an aged man, Plato recounts his views about philosophy and his high regard for "an older friend whom I should not hesitate to call the wisest and justest man of that time". (324e1-2). This admiration for Socrates would partly explain his overwhelming presence in the Platonic dialogues. A closer study of the dialogues reveals some of the characteristic features of this individual.

⁴⁷Vlastos, considers both Xenophon and Aristotle's testimonies quite instrumental to his thesis that there are two different 'Socrates' with opposing philosophies in the Platonic corpus: one of them is the actual individual, whereas the other one is the character. The evidence, he concludes, shows that the arguments discussed in the early dialogues, unlike the ones in the later dialogues, are those of the historical Socrates. In *Socrates: Ironist and Moral Philosopher*. Ithaca, New York: Cornell University Press, 1991, pp. 81-106.

⁴⁸See Irwin T.H. "Review of Leo Strauss 'Xenophon's Socrates". *Philosophical Review*, vol. 83, 1974, pp. 409-413. Even harsher is Russell's criticism of Xenophon's understanding of Socratic philosophy, for he considers "a stupid's man report of what a clever man says is never accurate because he unconsciously translates what he hears into something he can understand". *A History of Western Philosophy*. New York: Simon & Schuster, 1972, p. 85. Burnet, being more charitable, claims that had Socrates been like his counterpart described by Xenophon, he would have never been sentenced to death. However, to side with Vlastos, it would be rather ill-advised to totally ignore Xenophon's testimony of the philosopher's views, regardless of his poor, at times, understanding of the discipline. Ibid. pp. 99-106.

In the dialogues of the early period, Socrates is the enigmatic philosopher whose primary concern is how one should live. He wanders in the *agora* following his calling in the search for moral knowledge. His main tools are his devotion to the quest for true morality and the *elenchus*; literally, the examination of any unsuspecting subjects who would claim expertise on moral matters. His own view on such matters is simply admission of his own alleged ignorance; his hope is that his adversary through the *elenchus* will be exposed to his own ignorance as well. His approach would several times raise severe criticism. One of his contemporaries, Thrasymachus, would accuse him of using deceit as a debate technique. Socrates' goal, Thrasymachus claims, is to dismantle any available positive contributions made by others without offering anything constructive:⁴⁹

By Heracles, he said, that's just Socrates' usual irony (eironeia).50 I knew,

⁴⁹Whether Thrasymachus is right in his accusations is questionable. Here is not the place to argue for or against this thesis. Briefly, though, Thrasymachus' views have found a following in the modern scholarship. For instance, Friedländer claims that Socrates' tactic shows that the man who knows the truth can deceive better. In Friedländer, P. *Plato: Vol. 2: The Dialogues, First Period.* Translated by Hans Meyerhoff. New York: Bollinger Foundation, 1964, p.145. Kierkegaard also states that Socrates' irony is his medium to trick the sophists into truth. In Kierkegaard, S. *The Concept of Irony, with Constant Reference to Socrates.* Translated [from the Danish] with an introduction and notes by Lee M. Capel. London: Collins, 1966, p. 96. Vlastos offers a different reading of the Socratic *eironeia*. He says that Socratic ironies are not meant to deceive. Deceit comes into the picture because the hearer, left to his own devices to understand Socrates' "riddling ironies", misconstrues Socrates' intentions. In *Socrates, Ironist and Moral Philosopher*. Ithaca, N.Y.: Cornell University Press, 1991, pp. 21-44.

⁵⁰Thrasymachus' use of the term *eironeia* reveals a characteristic difference between what we commonly translate and understand as 'irony' and what the ancient Greeks meant when they used the term *eironeia*. Typically irony, the descendant of *eironeia*, is used to express something opposite to what was originally intended to be said, out of humor or mockery. On the contrary, *eironeia* denotes the intention to deceit. Instances of this meaning are found in Aristophanes' *Wasps* 174 and *Clouds* 449. Also in Plato's *Sophist* 268a-b, *Laws* (901e) and *Gorgias* 489d-e.

and I said so to these people earlier, that you'd be unwilling to answer and that, if someone questioned *you*, you'd be ironical and do anything rather than give an answer (*Republic*, Book 1, 337a2-5; also 336c-d).

The Socratic mission seems to change in the dialogues of the middle and late period where Socrates appears to be interested more in epistemological and metaphysical questions. This shift of philosophical interest in the Platonic dialogues⁵¹ along with the sketchy and at times inconsistent portrayal of Socrates' in the works of the previously mentioned sources raise two questions: Did Socrates, the philosopher, actually exist? Or is he the mouthpiece for avid fans of philosophy who went to extremes to declare its admirable way?

This question, dubbed the Socratic Problem, has been a thorny subject in the literature generating a great deal of controversy, and to do justice to it would require more than what I intend to do in this section. Yet it is worth noting the general viewpoint regarding this schism. The focal point of the controversy stems from one particular Platonic dialogue, the *Apology*. During his defense in the *Apology*, Socrates makes a number of remarks about his private life and his philosophical commitments. If the dialogue is for the most part accurate in substance, then it can be used as a significant source for the thought and character of the historical Socrates.

Advocates of the 'myth theory' claim that the Apology is part of the 'Socratic genre'.

Socrates of the middle and late period is the character Plato chooses to advance his own doctrines; whereas, the dialogues of the early period present the views of the actual philosopher. Others claim that in all the dialogues Socrates is just a character, and the change of focus simply reveals Plato's thought going through different stages of maturity. If the latter is proven to be true, it seems that Plato's works could not be used as a reliable source to discuss Socrates' existence as a philosopher. For more on this, see my discussion in section 1.8.

Specifically, they state that the trial gave rise to a 'Socratic genre' whose goal was not to give an accurate picture of Socrates' beliefs and opinions; rather, the aim was to defend and promote the life of a philosopher. Hence, the 'Socrates' who is speaking before the jurors is the chosen literary medium to show the public the principles and commitments of the philosophical life.⁵² There are several reasons as to why this view might be problematic. These are proposed by the 'accuracy theory' adherents whose claim is that the *Apology* is historically an accurate source for the thought and character of Socrates.⁵³ First, they state, there is not clear evidence that there was a 'Socratic genre' by the time the *Apology* was written. And even if there were, it does not make the *Apology* less accurate. Secondly, if Plato was misconstruing his evidence, his ancient audience would have criticized him, but there has not been any such criticism known. Thirdly, the *Antidosis*, a work written by the

⁵²Such a scenario has been advanced by Chroust, who considers that 'the ancient Socratica are not historiography or biography, but rather poetry or fabula" and that Socrates as a philosopher is merely "the product of a legend, created by a host of myth-makers". In Socrates Man And Myth: The Two Socratic Apologies of Xenophon. Notre Dame, Ind.: University of Notre Dame Press, 1957, pp. xi-xiv; 198-226. In ancient times it found support from Dion. Hal. in Rhet. 8 and 12. Other often cited literature is: Murray, G. A History of Ancient Greek Literature. New York: Appleton, 1897, p. 174; Shorey, P. What Plato Said. Chicago: The University of Chicago Press, 1933, p.33; Gigon, O. Sokrates, Sein Bild in Dichtung und Geschichte. Bern: A. Francke, 1947; Lesky, A. A History of Greek Literature. Translated by J. Willis and Cornelis de Heer. London, New York: Methuen, 1966, p. 520; Montuori, M. Socrates, Physiology of a Myth. Amsterdam: J.C. Gieben, 1981.

⁵³See Grote, G. *Plato and the Other Companions of Socrates*. Third edition. Vol. 1. London: J. Murray, 1875, pp. 281-282; Burnet, J. *Plato's Euthyphro, Apology of Socrates, and Crito*. Oxford: The Clarendon Press, 1924, pp. 63-66; Cornford, F. M. "The Athenian Philosophical Schools. I: The Philosophy of Socrates" in *Cambridge Ancient History*, vol. 6, 1933, p. 303; Osborn, E.B. *Socrates and his Friends*. London: English University Press, 1939, p. 194; Strycker, E. de "Les Temoignages Historicques sur Socrate" in *Melanges Gregoire* (1950); Lacey, A. R. "Our Knowledge of Socrates" in *The Philosophy of Socrates: A Collection of Critical Essays* edited by Gregory Vlastos. Notre Dame, Ind.: University of Notre Dame Press, 1980; Kraut, R. *Socrates and the State*. Princeton, 1983, pp.3-4.

rhetorician Isocrates⁵⁴ bears many similarities to the *Apology*. In it Isocrates presents a fictional defense of his own life and work as a rhetorician against the public's prejudices drawing from the travails of the Socratic life. It would make no sense for Isocrates to compare his life to the life of a fictional character, which would imply that the *Apology* is historically accurate.⁵⁵ But even if we assume that his *Antidosis* is not clearly as similar to the *Apology* in style as it has been proposed, still it should not be discredited as evidence. The implicit similarities in both works could be because both authors had recollections of their encounters with Socrates. If this is true, it could again partly justify the historical accuracy of the *Apology*.⁵⁶

In conclusion, since our knowledge of Socrates, the philosopher, comes directly from secondary literature—he himself did not write anything—it is inevitable that questions concerning the authenticity of the sources will be raised. This is exactly what the "myth theory" proponents have attempted to do. But the evidence against their thesis is too widespread to be ignored. Is it strong enough to settle the debate once and for all? By no means. Even if we are able to confirm one source over another, still we need to be cautious that any Socratic text unavoidably will be filtered through the biases and cultural experiences

⁵⁴Isocrates was an Athenian rhetorician and a contemporary of Plato whose school at his time was more reputable than Plato's Academy. Although both men were rivals, Plato speaks well of him and his abilities in the *Phaedrus* 279a1-b1.

⁵⁵See Allen, R.E. *Socrates and Legal Obligation*. Minneapolis: University of Minnesota Press, c1980, p. 35.

⁵⁶See Brickhouse, T.C., Smith, N. D. *Socrates on Trial*. Princeton, New Jersey: Princeton University Press, 1989, pp. 8-10.

of its authors. Keeping in mind the possible shortcomings of the 'accuracy theory', I will now turn to a brief discussion of Socrates' intellectual background, the final piece in the puzzle of this enigmatic personality.

1.7 Socrates' Intellectual Upbringing

Notwithstanding Socrates' admirable dedication to the intellectual life, very little can be asserted about the specific influences early in his life. As I have already discussed previously, the historical and intellectual environment to which he was exposed in some manner influenced his views of the philosophic life. How significant these influences were on his intellectual upbringing still remains to be seen. Evidently, as any other Athenian, Socrates had the chance, would he choose so, to read the works of the 'learned men' that were available at the bookshops of Athens to purchase for a drachma (*Apology* 26d6-e2). Also, on several occasions, Plato portrays him to be in the company of well known intellectuals of his time, whose views Socrates appears to be well versed in.

Early in life Socrates, besides his basic training in music⁵⁷ and gymnastics (*Crito* 508d8-e), had shown an interest in natural philosophy:

When I was young man I was wonderfully keen on that wisdom which they call natural science, for I thought it splendid to know the causes of everything, why it comes to be, why it perishes and why it exists. (*Phaedo* 96a6-98b6).⁵⁸

His fascination with natural philosophy has also been supported by accounts that he had been

⁵⁷In the *Euthydemus* 272c1-3 and 295d3-5 briefly discusses his experience as a student of Connus, the harpist.

⁵⁸See also *Diogenes Laertius* 2.19, 45.

acquainted with Archelaus, the disciple of Anaxagoras.⁵⁹ To what extent he studied these things is unknown. The evidence is not enough to show that this had been more than an interest of his youth. In his defense before the Athenian jury he only denies to knowing, at least in the Socratic sense, the "things in the sky and things below the earth",⁶⁰ but he does not deny having studied them.

Finally, there are some other sporadic instances in Plato where Socrates claims to have been influenced by the famous sophist, Prodicus, ⁶¹ and two women, Pericles' wife, Aspasia, in oratory (*Menexenus* 235e8-236a1) and Diotima who had been, purportedly, his teacher of philosophy (*Symposium* 201d1-212b2).

We can only speculate how much Socrates' educational training helped him to absorb the existing culture and create his own niche within that culture. As with any other human being, Socrates also was the product of his time. The degree of influence on his life can be approximated by addressing individual instances, by investigating those areas that could

⁵⁹Diogenes Laertius has been the main source of this connection in 2.16, 19. Modern scholars in agreement with this are: Guthrie, W.K.C. *A History of Greek Philosophy*. Vol 2. Cambridge: Cambridge University Press, 1962, p. 239; Winspear, A.D., Silverberg, T. *Who Was Socrates?* New York: Russell & Russell, 1960, pp. 36-38. Zeller, on the other hand, finds this evidence inconclusive. See Zeller, E. *Socrates and the Socratic School*. Newly translated from 3rd German edition by O.J. Reichel. London: Longmans, Green and Co.,1885, pp. 57-59.

⁶⁰Apology 19c1-d5, 23d2-9; *Phaedrus* 229c6-230a6. Also in Xenophon's *Memorabilia* 1.1.14; Aristotle also confirms that "Socrates was busying himself about ethical matters and neglecting the world of nature as a whole but seeking the universal in these ethical matters, and fixed thought for the first time on definitions." (*Metaphysics* Book 1, 987b1-3)

⁶¹Cratylus 384b2-6; Charmides 163d3-4; perhaps in the *Meno* 96d4-5, where Socrates' rather mischievously mentions Prodicus' name.

possibly contribute to the way he uses specific terms that are the building blocks of his philosophy. As Aristotle beautifully describes it:

The investigation of the truth is in one way hard, in another easy. An indication of this is found in the fact that no one is able to attain the truth adequately, while, on the other hand, no one fails entirely, but everyone says something true about the nature of things, and while individually they contribute little or nothing to the truth, by the union of all a considerable amount is amassed. (*Metaphysics* II.1 993a27-993b3)

To provide an exhaustive but nonetheless valuable account of all the different forms of art and literature that very likely have left their mark on Socratic thinking would be beyond the scope of this work. Rather, I will mostly focus on the works of the early Greek philosophers in the hope of finding a philosophically meaningful background for the term (dunamis) Socrates so stingily elaborates. Before doing so, I will end this chapter with one final preliminary. Since my investigation of dunamis will be merely focused on the early dialogues, it is important that I mention the criteria, if any, that determine the division of the Platonic dialogues to early, middle and late.

1.8 A Note on the Platonic Dialogues

Any interpreter of the Platonic dialogues is confronted with the problem of making the connections of the diverse philosophical contents in each of the dialogues. Since Plato himself has chosen anonymity, it is hard to know where and to what extent he reconstructs Socrates' views or Socrates is the mouthpiece for his own views.

Since the beginning of nineteenth century there have been two trends of interpreting the Platonic dialogues. According to the first one, the dialogues investigate the same issue

from a different point of view, thus leading the student to different levels of understanding.⁶² Scholars who subscribe to this approach do not necessarily deny Socrates' influence on Plato. Rather, they deny the localization of this influence in the traditionally recognized early period in Plato's thought.⁶³ By contrast, the second approach promotes the idea that the diversity of issues and their treatment in the dialogues reveal the different stages of Plato's intellectual development. Further proof of this development is shown by the change in Plato's style.⁶⁴ The latter has prompted several scholars to seek a chronological order within the dialogues.

As a consequence, the dialogues are traditionally divided into three consecutive groups. In the early period dialogues which are considered Socratic, Plato has yet to establish his own views. As a faithful disciple of Socrates, he "is imaginatively recalling, in form and substance, the conversation of his master without as yet adding to them any distinctive

⁶²Subscribers with slightly different versions of this view, known in literature as unitarian, are Friedländer, P. *Plato: Vol. 2: The Dialogues, First Period.* Translated by Hans Meyerhoff. New York: Bollinger Foundation, 1964; Jaeger, W. *Paideia: the Ideals of Greek Culture.* Vol. III. Translated by G. Highet. Oxford: B. Blackwell, 1944. Shorey, P. *What Plato Said.* Chicago: The University of Chicago Press, 1933.

⁶³Kahn, for instance, admits the impact of Socrates' on Plato's philosophic development, but denies any shift in Plato's position between the *Laches*, *Charmides*, and *Protagoras*, traditionally considered Socratic dialogues, and the *Phaedo* and *Republic*. Such a shift has been argued by the developmentalists to prove an early period in Plato where he merely reconstructs Socrates' views. Kahn, C.H. *Plato and the Socratic Dialogue*. Cambridge: Cambridge University Press, 1996, pp. 36-48.

⁶⁴For more on the stylistic criteria see Brandwood, L. *The Chronology of Plato's Dialogues*. Cambridge, New York: Cambridge University Press, 1990. In this work, Brandwood gives a critical presentation of the works of two pioneers in Platonic scholarship, Lewis Campbell and Friedrich Blass, who attempted to seek ordering in the dialogues in virtue of stylometric criteria.

doctrines of his own."⁶⁵ The middle and the late period dialogues show Plato gradually moving away from the views of his teacher and establishing his own. The most avid proponent of this approach is Gregory Vlastos who sees the philosophic views expounded by the Socrates of the early period not only distinct but at times antithetical compared to the Socrates of the middle and late dialogues.⁶⁶ Plato reinvents Socratic philosophy by composing "what he thinks *at the time of writing* would be the most reasonable thing for Socrates to be saying".⁶⁷

Setting aside some obvious attractiveness to this view, there still is the question of the soundness of the basic assumptions on which relies on are. Specifically, it is far from obvious whether stylometry can establish chronology.⁶⁸ Does this diminish the significance

⁶⁵Guthrie, W.K.C. *History of Greek Philosophy*, vol. iv. Cambridge: Cambridge University Press, 1975, p. 67.

⁶⁶See, See, for instance, the doctrinal differences between the immanent essences of the *Euthyphro* and the *Meno*, and the Forms of the *Phaedo*.

⁶⁷Vlastos, G. "Socrates contra Socrates" in Socrates: Ironist and Moral Philosopher. Ithaca, New York: Cornell University Press, 1991, p. 50.

⁶⁸Chronological ordering within the dialogues on stylometric grounds is still a matter of conjecture and to present all the relevant accounts would be a painstakingly process and beyond the scope of this inquiry. For a detailed exposition on both the division and the chronological ordering of the dialogues, see: Vlastos, G. Socrates, Ironist and Moral Philosopher. Ithaca, New York: Cornell University Press, 1991, pp. 45-80; Irwin, T. Plato's Gorgias, translated commentary. Oxford: Clarendon Press, 1979, pp. 1-12; Penner, T. "Socrates and the Early Dialogues" in *The Cambridge Companion to Plato*. Cambridge: Cambridge University Press, 1992, pp.121-13; Ross, W.D. Plato's Theory of Ideas. Second edition. Oxford: Clarendon Press, 1953, pp.1-10. Vlastos'criteria on the division of the Platonic dialogues have not gone uncontested. Nails has argued against his thesis that there are two distinct philosophies and hence two different philosophers in the Platonic dialogues. In Nails, D. "Platonic Chronology Reconsidered." In Bryn Mawr Classical Review, vol. 3, 1992, pp. 314-327. Of the same view is Kahn, C.H. Plato and the Socratic Dialogue. Cambridge: Cambridge University Press, 1996, pp.36-70. Graham denies that there is an

of the philosophical content of the dialogues? By no means. Insofar as Socratic literature has yet to conclusively resolve the issue, I only need, for the sake of my arguments, to side with one aspect of it, admitting its possible shortcomings. In short, I believe that the arguments presented in the early Plato are the ones of the historical Socrates as understood by Plato. Plato was not a passive listener; he was a philosopher in the making. So it is quite understandable in the early Plato to have an amateur philosopher mostly in agreement with the views of a mentor he so highly respects. In the middle and late period Plato, having reached philosophical maturity and acting out of pure love for truth, will improve his teacher's inconsistencies in his thinking and at the same time create his own legacy.

Of course, I recognize that more needs to be said to defend this view but this is not the place and time to do it. As I have already mentioned, for the purposes of this project I only need to side with one part of the literature. Since my view borrows elements from Vlastos' original position, I will follow his classification of the Platonic dialogues:

Early Dialogues

Apology, Charmides, Crito, Euthyphro, Gorgias, Hippias Minor, Ion, Laches, Protagoras, Republic Book I.

Transitional Dialogues

Euthydemus, Hippias Major, Lysis, Menexenus, Meno.

Dialogues of the Middle Period

Cratylus, Phaedo, Symposium, Republic Books II-X, Phaedrus, Parmenides, Theaetetus.

Dialogues of the Late Period

Timaeus, Critias, Sophist, Politicus, Philebus, Laws.

early period in Plato's philosophic development. In Graham, D.W. "Socrates and Plato." In *Phronesis*, vol. 37, 1992, pp.156-163. Beversluis argues that the views expressed in the early Plato are not the views of the historical Socrates. In Beversluis, J. "Vlastos' Quest for the Historical Socrates." In *Ancient Philosophy*, vol. 13, 1993, pp. 293-313.

1.8 Conclusion

Dunamis is a tapestry of many threads. To begin to see the complex nature of this tapestry, it is essential that I addressed its components. Specifically, what I intended to do in this chapter was to present the protagonists and the cultural environment that gave rise to their philosophical quest. By doing so, one can get an insight into how and why the philosophies of Plato, Aristotle and more particularly Socrates came about, as well as their interdependence with the past.

My inquiry has yielded the following observations. Ancient Greek philosophy is the product of several adaptations of foreign and native elements to the Greek culture. The representatives of the early philosophical thought, the early natural philosophers, engaged the existing mythopoetic tradition and gradually replaced it with a new argumentative, self-critical and explanatory approach. The various dramatic changes in the areas of economy, political affairs, art and literature would also bear their marks on philosophic reasoning. Their significance is evident specifically in Socrates's philosophical views. His insatiable need for the criteria of a true knowledge of morality is partly triggered by the looming relativism pertaining to the mores and other aspects of life in his birth city of Athens.

The impact of his philosophy on his contemporaries and anyone after them who undertook to study his search for a life worth living made it even more important to look into the man himself and the controversy surrounding his existence as a philosopher. The gist of this controversy is that Socrates, the philosopher, as portrayed in the early Platonic works, is a literary fiction and not a historical figure; he is the chosen medium of a 'Socratic genre' to promote the admirable way of the philosophical enterprise. To this charge critics reply

there is not sufficient evidence to prove the existence of a 'Socratic genre' at the time Plato wrote the *Apology* (the work cited for the controversy). On the contrary, it seems there is evidence that could show that Socrates, the philosopher, actually existed. Specifically, the similarities in tone and substance between Isocrates' *Antidosis*, a fictitious defense of a rhetorician's life and works, and Plato's *Apology* could imply that both authors have written from recollections of their actual encounters with the historical Socrates. Although these points do not satisfactorily resolve the issue, for the sake of my arguments, I only need to side with one perspective. Despite the shortcomings, I take the views of Socrates in the early Platonic works to be the ones of the historical Socrates as understood by Plato.

With this said, now I will turn to the discussion of the concept of *dunamis*, its use and philosophical development in the early philosophers and Socrates.

CHAPTER TWO

The Ancient Greek Kosmos: A Plethora of Dunameis at Work

2.1 Introduction

Ancient Greeks conceived the universe and *kosmos*¹ dynamically. *Dunamis* is the underlying cosmic principle that can be applied over a whole range of things, both animate and inanimate. Although its nature was unknown to them, they would either tacitly or explicitly claim it to be one of the defining characteristics of "that which is".² Plato for the first time explicitly states that *dunamis* is an obscure entity in that it does not have any perceptible properties such as color or shape we normally use to distinguish one thing from another. He continues that our only way of determining its existence is by observing what it is set over and what it does:

Powers are a class of the things that are $(\delta \upsilon \nu \grave{\alpha} \mu \in \iota \zeta \in \grave{\iota} \nu \alpha \iota \gamma \grave{\epsilon} \nu \grave{\circ} \zeta \tau \iota \tau \grave{\omega} \nu \check{\circ} \nu \iota \omega \nu)$ that enable us-or anything else for that matter-to do whatever we are capable of doing. Sight, for example, and hearing are among the powers, if you understand the kind of thing I'm referring to. --I do. Here's what I think about them. A power has neither color nor shape nor any feature of the sort

¹The early natural philosophers drew a distinction between universe $(sympan/\sigma \dot{\upsilon}\mu\pi\alpha\nu)$ and kosmos (κὸσμος). The former literally consists of the totality of all things, whereas the latter is a world system that can be limited both spatially and temporarily. See Leucippus' account on cosmogony where he "declares the universe to be unlimited ... Of this, some is full and some is empty [void], and he declares these [full and void] to be elements. An unlimited number of KOSMOI arise out of these and are destroyed into these." (Diogenes Laertius, Lives of the Philosophers 9.31-32/DK 67A1). This is the first time in the ancient Greek literature such a distinction appears.

²What in particular they refer to by the term "being" depends on the cosmic system each philosopher recognizes to account for all aspects of the world. In the early cosmological systems, *dunamis* is implicitly known to be the property of the cosmic principle that is either the agent for the harmonious coexistence of the various constituents of the universe or a constituent itself. See the relevant discussion in chapter 3, sections 3.2 and 3.3.

that many other things have and what I use to distinguish those things from one another. In the case of a power, I use only what it is set over and what it does, and by reference to these I call each the power it is: What is set over the same things and does the same I call the same power; what is set over something different and does something different I call a different one.(*Republic* V 477cd)

There is a wide range of things of which *dunameis* appear to be one of the essential properties. Any sensible substance, Aristotle holds, has the ability (*dunamis*) either to do or suffer change or both:

Every perceptible body possesses the power of acting or of being acted upon, or both of these ($\pi \hat{\alpha} \nu \sigma \hat{\omega} \mu \alpha \alpha i \sigma \theta \eta \tau \hat{\nu} \nu \tilde{\epsilon} \chi \in i \delta \hat{\nu} \nu \alpha \mu \nu \pi \sigma i \eta \tau i \kappa \hat{\eta} \nu \tilde{\eta} \pi \alpha \theta \eta \tau i \kappa \hat{\eta} \nu \tilde{\eta} \tilde{\alpha} \mu \dot{\phi} \omega$). (On the Heavens, I.7, 275b5)

Xenophon, before Aristotle, attributed numerous and every kind of *dunameis* to the earth. Such would be the properties (*dunameis*) of the plants that men had to learn at one time so that they could separate the useful from the harmful ones:

The boys of the time used also to learn the properties of the products of the earth $(\tau \hat{\omega} \nu \ \varphi \nu \hat{\epsilon} \kappa \ \tau \hat{\eta} \zeta \ \gamma \hat{\eta} \zeta \ \tau \hat{\alpha} \zeta \ \delta \nu \nu \hat{\alpha} \mu \in i \zeta)$, so as to avail themselves of the useful ones and keep away from those that were harmful. (Xenophon, *Cyropedia*, VIII.8, 14)

Plant, animal, and human *dunameis* constitute only a part of the *dunameis* of *kosmos*. The underlying physical forces responsible for subsistence and motion are also the product of a multitude of *dunameis*:

And further the force of that which initiates movement must be made equal to the force of that which remains at rest. For there is a definite quantity of force or power (ἔστι γὰρ τι πλῆθος ἰσχὺος καὶ δυνὰμεως) by dint of which that which remains at rest does so, just as there is of force by dint of which that which initiates movement does so. (Aristotle, Movement of the Animals, 3, 699a30-35)

Socrates also recognizes the dunameis of the gods that are greater than their human

counterparts. In the Cratylus 397c, 405a and 438c, Socrates, preoccupied with the correctness of name-giving, makes references to the divine dunameis ($\theta \in \text{Iotèrag} \delta \text{unàmeis}$) that are far surpassing the human ones ($\mu \in \text{i} \zeta \omega \tau \text{inà} \delta \text{unamein}$).

This is just a brief sample of the wide array of applications of *dunamis* in the Greek universe. In the course of this chapter, the reader will get more chances to see how ubiquitous the concept has been not only in philosophy but in other aspects of the ancient Greek literature. The frequency with which the term and its variables appear in the ancient texts makes it all more important to say why it received such attention by the ancients. Hence, I start this exposition with a brief discussion of the reasons the ancient philosophers either implicitly or explicitly gave for dunamis being an important tool to their metaphysics. Next, to better facilitate the interpretation of the evidence of this project, I look into the etymology and derivatives of the concept of dunamis with the help of textual evidence taken from the various branches of the ancient Greek literature. The goal here is to familiarize the reader with the different nuances of the derivatives that are located within the text. Specifically, dunamis is commonly translated as "capacity", "potentiality", "possibility" or "power". Which of the four terms closely relates to the concept will depend, as we will see, on the form of the noun. To give an example, dunamei, which is the dative of the noun, when followed by the verb 'to be' indicates a thing's potentiality rather than its capacity. I conclude this chapter by turning to the relationship between potentiality and capacity. Although these two terms address two different kinds of activities, as Aristotle first notices, they are focally related. The dawn of this relationship is first traced in the writings of the early thinkers.³

2.2 Why did the Ancients Bother?

The term *dunamis* is relatively little investigated in the early writings of the ancient Greek literature. Ancient historians, epic poets, tragedians or even writers of comedy⁴ often used the term but did not go to any lengths to investigate its ontological status. It merely was assumed that the readers and hearers understood what the word meant. To focus on what kind of species *dunamis* is was not the goal of their writing, especially when *dunamis* has "neither color nor shape nor any feature of the sort that many other things have" (*Republic* V 478c) that could give anyone a tangible way to investigate its nature. Thus, any understanding of its works would have to come from assumptions we make observing its effects.

With the beginnings of philosophy, *dunamis* becomes the centerpiece of several writers' accounts on cosmogony. The testimonial and doxographical evidence reveals that they assumed *dunamis* to be one of the underlying principles for all things which have come to exist, all things which are coming into existence now, and all things which will do so in the future. For instance, the Pythagoeran Philolaos makes *dunamis* the foundational property of the Decad (Ten-ness) upon which its function and essence depend. Likewise, Ecphantus' *dunamis* is one the basic properties of his primordial bodies (*somata*), size and figure being

³See chapter 3, section 3.3, especially the discussion on the Pythagorean Philolaos.

⁴I provide the relevant textual evidence in my subsequent discussion of the etymology and derivatives of the term.

the other two. For Empedocles, the cosmic constituents are four elements and two *dunameis*,

Love and Strife, responsible for the mixing and dissolving of the original elements.⁵

Following the early thinkers, Plato also acknowledges the relation between *dunamis* and being. In the *Sophist* (247d-e), he clearly states that a proper understanding of "that which is" $(\tau \grave{\alpha} \, \check{o} \nu \tau \alpha)$ involves the term *dunamis*. He says that the reality of a thing is defined by its *dunamis* to cause change to another thing or to suffer change by another thing.⁶ Hence, he concludes, that a proper definition of being amounts to nothing else but *dunamis*:

I'm saying that a thing really is $(\pi \hat{\alpha} \nu \tau \circ \hat{\nu} \tau$

Although, the accounts of *dunamis* as the capacity to change play an integral role in the explanation of being, still they are not enough to explain how a thing can come to be out of something that is not. Aristotle recognizes this weakness of his predecessors by claiming

⁵Here I intend to provide only a representative sample of the early accounts of *dunamis*. A far more substantial discussion on those follows in the third chapter.

⁶Although it is not quite clear what Plato exactly means here when he refers to "that which is", I take him to imply that part of "that which is" that has body. My evidence for this comes from an earlier passage in the *Sophist* where he appears to claim that "that which is" can be divided in that which has body and that which does not: "it's enough if they admit that even a small part of *that which is* doesn't have body. They need to say something about what's common to both it and the things that do have body, which they focus on when they say that they both *are*." (247d1-5) Of course more needs to be said here, but if this is correct, then what he says in the passage in the main text seems to make sense. *Dunamis*, which is the capacity to change or cause change, is a necessary and sufficient condition for that part of "which is" that has body. If, on the other hand, by "that which is" Plato refers to some kind of unchanging substance, then the ascription of *dunamis* as the capacity to change would be problematic.

that Anaxagoras, Empedocles, Anaximander and Democritus have to imply pre-existing potentialities (*dunameis*) in their accounts:

Therefore not only can a thing come to be, incidentally, out of that which is not, but also all things come to be out of that which is, but is potentially, and is not actually. And this is the 'One' of Anaxagoras; for instead of 'all things were together' and the 'Mixture' of Empedocles and Anaximander and the account given by Democritus, it is better to say all things were together potentially but not actually. (*Metaphysics* XII.2, 1069b15-25)

To address this special feature of *dunamis*, in the beginning of *Metaphysics* Book IX, Aristotle states that "being" is defined ($\lambda \hat{\epsilon} \gamma \in \tau \alpha \iota \tau \delta \delta \nu$) two different ways: one in terms of "what" (τὶ), "quality" (ποιὸν) and quantity (ποσὸν), and another one in terms of potentiality (κατὰ δὺναμιν), fulfillment (ἐντελὲχειαν) and of function (κατὰ τὸ ἔργον):

We have treated of that which *is* primarily and to which all the other categories of being are referred-i.e. of substance. For it is in virtue of the formula of substance that the others are said to be-quantity and quality and the like; for all will be found to contain the formula of substance, as we said in the first part of our work. And since 'being' is in one way divided into 'what', quality, and quantity, and is in another way distinguished in respect of potentiality and fulfillment. (1045b29-35)

Following the tradition, Aristotle acknowledges that all three states of movement, change, and blending of the elements strongly indicate existing *dunameis*, since they entail change of quality, that is transition from one state to another. However, proper reasoning shows that *dunamis* implies the possibility of coming to be; in his words: "as reason requires: the actuality of any given thing can only be realized in what is already potentially that thing, i.e. in a matter of its own appropriate to it." (*On the Soul*, II.2, 414a25-27). Hence, he will devote

⁷See the passage above from the Theaetetus 152e; also *On the Soul*, II.5, 417a22-35.

Metaphysics IX to investigate all the different senses of dunamis that are derivatives of "the formula of potentiality in the primary sense." (Metaphysics IX.1, 1046a1-16); namely, dunamis is the capacity of something to change or cause change (Metaphysics, V.12, 1019a18-20).

The aspects of *dunamis* Aristotle finds more attractive and for which he elaborates in chapters 6-9 of *Metaphysics* IX, are the ones that signify something's being *dunamei* something, that is, he is concerned with *dunamis* as a way of being something.⁸ This specific sense of *dunamis*, which is translated as potentiality (the ability to be) versus capacity (the ability to change) will prove to be quite important for Aristotle. For instance, it will help him show how matter and form become a unified thing. Matter is potentially the thing,⁹ whereas form is actually the thing:

We say that substance is one kind of what is, and that in several senses: in the sense of matter or that which in itself is not a this, and in the sense of form or essence, (μ oρφην καὶ εἶδος) which is the sense of that which is compounded of both. Now matter is potentiality, form actuality (ἔστι δ ἡ μὲν ὕλη δὺναμις τὸ δ ᾽ εἶδος ἐντελὲχεια). (On the Soul, II.1, 412a5-10)

Further it will help him discuss the possibility that something becomes **F**, although it is not potentially **F**. For instance, water becomes wine although it is not potentially wine or "a living man" becomes dead although he "is not said to be potentially dead." (*Metaphysics*

⁸I owe this part of the discussion to Ide's helpful suggestions on the importance of dunamis in Aristotle's Metaphysics. See Ide, H.A. "Dunamis in Metaphysics IX" in Apeiron, vol. 25, 1992, pp. 1-26.

⁹One of the reasons Aristotle believes that matter exists in a potential state is "because it may attain to its form"; and when it does, it actually exists. (*Metaphysics* IX..8, 1050a15-16)

VIII.5, 1044b30-1045a6). To account for all these deviations of a proper account of being, Aristotle will eventually address his model of *dunamis*.

The purpose of this section was to show the gradual rise of dunamis to a philosophically significant concept for the ancient philosophical systems through the eyes of the ancients. Their observations of change in nature required that the thing that undergoes or initiates the change have a specific property, namely, dunamis. Defining dunamis only as a thing's capacity to cause change or suffer change, though, was not enough to account for a thing's possibility to be something and the possibility to become something that potentially it is not. Aristotle clearly notices that these two uses should also be ascribed to dunamis which he defines as potentiality. When he refers to this notion, he switches to the dative of the noun, dunamei ($\delta \nu \nu \alpha \mu \in 1$). He will also use several of the fixed expressions "kata dunamin" (κατὰ δὺναμιν), "para dunamin" (παρὰ δὺναμιν), "huper dunamin" (ὑπὲρ δὺναμιν), "to dunasthai" (τὸ δὺνασθαι) and the phrase "dunaton estin" (δυνατὸν έστὶν) which merely show the possession of a dunamis rather than its exercise. These expressions are only a fraction of the various forms of the word found in the Greek texts. Since these are an integral part of interpreting and analyzing the evidence, in the following section I will inquire into the etymology and derivatives of the word and the different meanings they may carry.

2.3 Dunamis: Etymology and Derivatives

Thus far a convincing etymology for the term has not been discovered. One etymological scenario, the least probable one, claims that *dunamis* may have derived from

den $(\delta \dot{\eta} \nu)$ or deros $(\delta \eta \rho \dot{\delta} \zeta)$ both from the Dorian root dan $(\delta \dot{\alpha} \nu)$ that means "of lengthy duration", "long term". ¹⁰ It is most likely, though, that the term comes from the stem duna- $(\delta \nu \nu \alpha)$. Words that derive from this stem have the basic meaning of "being able" or "having a capacity".

The first derivative from the stem duna is the verb, dunamai ($\delta \tilde{\upsilon} \nu \alpha \mu \alpha \iota$). Its original meaning is "I am able", "I am capable of". Abundant instances of this form are first found in the Homeric epics. In the form of to dunasthai ($\tau \tilde{\upsilon} \delta \tilde{\upsilon} \nu \alpha \sigma \theta \alpha \iota$), of being capable, and in the fixed phrase kata dunamin ($\kappa \alpha \tau \tilde{\alpha} \delta \tilde{\upsilon} \nu \alpha \mu \iota \nu$) the meaning merely signifies the possession of a dunamis rather than the exercise of it. This is best illustrated in Aristotle's Protrepticus, fragments B79-83, where he distinguishes two ways of sensing for living animals. Sensing animals can see both because they "have sight and are naturally capable of seeing, even if they happen to have their eyes shut," and because they "are using the faculty and are looking at something." $(B79)^{12}$

¹⁰See Dorbarakis, P.H. *Abridged Dictionary of the Ancient Greek Language*. 5th edition. Athens, Greece: Hondrorizos & Co., 1989.

¹¹There are one hundred and nineteen instances of the verb and its different forms in both the Odyssey and Iliad where the original meaning is preserved. Following are a few references out of each book from both poems: *Odyssey*, Book 1, 78; 2, 188; 3, line 89; 4, 388, 644; 5, 89; 9, 27; 10, 305; 11, 260; 12, 232; 16, 207; 17, 144; 18, 230-235; 19, 157; 21, 403; 23, 11; 24, 170. *Iliad*, Book 1, line 241, 562, 586; 2, 342; 3, 236, 451; 5, 475; 6, 100, 227; 9, 351; 11, 116; 12, 432; 13, 551, 605, 633; 14, 33, 423; 15, 21, 405; 16, 107, 515; 18, 61, 442;19, 389; 21, 174; 22, 201; 22, 199; 23, 719; 24, 403.

¹²Aristotle uses interchangeably the terms possessing (ἔχ∈ιν/ἔξις) and dunamis, see especially fragments B40 and B67. It has been suggested that Aristotle's special use of dunamai has been first introduced by Plato in the Euthydemus (277e-278a) and Theaetetus (197c1-d4). In the Theaetetus passage, Plato states that the person who has caught the birds has acquired them in the sense that "he has a certain dunamis in respect of them" so that whenever he wants he can exercise that dunamis to have them under his control. For more

Syntactically, when the verb is followed by an object in the accusative the meaning changes to "to be equal to". So for instance in the *Anabasis*, I, 5, 6, Xenophon says that "the siglus is equal to seven and one-half Attic obols [ὁ δὲ σιγλὸς δὺναται ἕπτ' ὀβολοὺς καί ἡμιοβὲλιον Άττικοὺς]". *Dunamai* may also mean "to signify to" or 'to amount to". When both Dionysodorus and Ctesippus argue over what the statement "speaking against" entails, Socrates asks whether

The argument amounts to claiming $[\tau \circ \hat{\nu} \circ \hat{\nu}$

When *dunamai* refers to some kind of subjective moral attitude, then it may mean "to wish" or "not to wish". An instance of this variation in the meaning is found in Homer, where Athena consoling Odysseus of his travails says:

Always you are the same, and such is the mind within you, and so I do not wish to abandon you when you are unhappy ($\sigma \hat{\epsilon}$... où $\delta \hat{\nu} \alpha \mu \alpha \iota \pi \rho o \lambda \iota \pi \in \hat{\iota} \nu \delta \hat{\nu} \sigma \tau \eta \nu o \nu \hat{\epsilon} \delta \nu \tau \alpha$), because you are fluent, and reason closely, and keep your head always. (*Odyssey*, 13, 331)

Another frequently used word in the ancient text is dunatos ($\delta uvat \delta \zeta$), the verbal adjective of dunamai. Generally, in ancient Greek any verbal adjective that ends in -tos ($\tau o \zeta$) means "that which is able to do/suffer what the verb describes". Likewise dunatos means "has the ability, the capacity or the power", "powerful, capable, able" to do what he

details on the distinction see Menn, S. "The Origins of Aristotle's Concept of Ένὲργεια: Ένὲργεια and Δὺναμις" in *Ancient Philosophy*, vol.14, 1994, pp. 81-83.

¹³Often the meaning of "able to do x" or "capable to do x" is attached to adjectives ending in -tos with a negation in front of them. Such is the case with alutos (ἄλυτος) meaning "that which cannot be solved", or ouk onomastos (οὐκ ὀνομαστὸς) meaning "that which cannot be named". See Lorenjatos, P. History of the Syntax of the Ancient Greek Language. 2nd ed. Athens, Greece: Kakoulidis & Co., 1989, pp.129-131.

wishes when he wishes given the right circumstances; or as Socrates and Hippias point out, the *dunatos* is capable of performing an action if there is no factor external to his volition, some kind of disease in this case, that would prevent him from manifesting that desire:

But each person who can do what he wishes when he wishes is powerful [δυνατὸς δὲ γ'ἐστὶν εκαστος ἄρα, ὅς ἄν ποιῆ τὸτε ὅ ἄν βοὺληται ὅταν βοὺληται]. I mean someone who is not prevented by disease or other such things, someone like you with regard to writing my name. You have the power to do this whenever you wish to. That's what I mean. Or don't you say that one in such a condition is powerful?(Hippias Minor 366b7-c3)

What *dunatos* may refer to varies widely. For instance, Xenophon discusses those who are *dunatoi* in body and soul:

Whereas, Thucydides describes Pericles as someone who is the most *dunatos* both in speech and actions:

and finally Pericles, son of Xanthippus, the foremost man of the Athenians at that time, showing the greatest ability in both speech and action $[\delta \nu \alpha \tau \omega \tau \alpha \tau \sigma \zeta \lambda \epsilon \gamma \epsilon \nu \tau \epsilon \kappa \alpha \tau \rho \alpha \sigma \sigma \epsilon \nu]$, came forward and advised them as follows. (*Thucidides* I, 39)

As a neuter adjective, oson ge dunaton ($\mathring{o}\sigma ov \gamma \in \mathring{o}\upsilon v\alpha \tau \mathring{o}v$) along with the fixed phrases to dunaton ($\mathring{t}\mathring{o}\mathring{o}\upsilon v\alpha \tau \mathring{o}v$) and ta dunata ($\mathring{t}\mathring{\alpha}\mathring{o}\upsilon v\alpha \tau \mathring{\alpha}$), generally emphasize the potentiality, rather than the capacity. ¹⁴ Here I use potentiality in the Aristotelian sense.

¹⁴Admittedly Aristotle recognizes a sense of *dunata* that is not related to a *dunamis* as it is in the case of "that which is not of necessity false." The *dunata* relevant to a *dunamis*,

Specifically, Aristotle makes a distinction between something's being potentially (*dunamei*) something as opposed to a thing's capacity (*dunamis*) to change or cause change. ¹⁵ This is best illustrated in his example of a piece of wood being potentially (*dunamei*) a casket:

It seems that when we call a thing not something else but 'of' that something (e.g. a casket is not wood but of wood, and wood is not earth but made of earth, and again perhaps in the same way earth is not something else but made of that something), that something is always potentially $[\dot{\alpha}\in\dot{\iota}\,\dot{\epsilon}\,\kappa\in\dot{\iota}\nu$ 0 $\delta\nu\nu\dot{\alpha}\mu\in\iota$ 1 (in the full sense of the word) the thing which comes after it in this series.. (*Metaphysics* IX.7, 1049a19-23)

Dunastes (δυνὰστης), the noun of agency, derives from the past tense, passive voice, of dunamai, edunasthen (ἐδυνὰσθην). It emphasizes the agent of the capacity, that is, "the one who is able to do something", but it is more commonly used in context to show someone who exercises authority. A dunastes can be someone of divine power, as in Sophocles' ascription of Zeus:

what madness of man, O Zeus, can bind your power? Not sleep can destroy it who ages all, nor the meariless months the gods have, unaged in time monarch you rule of Olympus' gleaming light $[\dot{\alpha}\gamma\dot{\eta}\rho\omega\zeta$ δὲ χρὸν ω δυνὰστας κατὲχεις 'Ολὑμπου]. (Sophocles, *Antigone*, 608)

Or it may refer to someone of human powers, a human ruler:

When these Nasamaians on their coming were questioned if they brought any news concerning the Libyan desert, they told Etearchus that here had been among them certain sons of their chief men, proud and violent youths $[\gamma \in \nu \grave{\epsilon} \sigma \theta \alpha i \, \mathring{\alpha} \nu \delta \rho \hat{\omega} \nu \, \delta \nu \nu \alpha \sigma \tau \grave{\epsilon} \omega \nu \, \pi \alpha i \delta \alpha \zeta \, \mathring{\nu} \beta \rho i \sigma \tau \mathring{\alpha} \zeta]$. (Herodotus II, 32)

Aristotle insists, are derived from the primary sense of *dunamis* to move or to be moved: "But the senses which involve a reference to capacity (*ta dunata*) all refer to the primary kind of capacity (*dunamis*); and this is a source of change in another thing or in the same thing *qua* other." (*Metaphysics* V.12, 1019b30-1020a2)

¹⁵For more details on the distinction between potentiality and capacity see the subsequent section.

Dunastes can also be ascribed to inanimate objects such as the stars in Aeschylus' Agamemnon, 6:

... all the stars of night burdened with and again with heat for men, dynasties in their shining blazoned on the air $[\kappa\alpha i \tau o i \zeta \phi \epsilon \rho o \tau \alpha \zeta \chi \epsilon i \mu \alpha \kappa \alpha i \theta \epsilon \rho o \zeta \beta \rho o \tau o i \zeta \lambda \alpha \mu \pi \rho o i \zeta \delta v v \alpha \sigma \tau \alpha \zeta]$.

The last but not the least important derivative in this group is dunamis ($\delta \dot{\upsilon} \nu \alpha \mu \iota \zeta$). Generally, it can be translated as 'capacity', 'power', 'ability' or 'potentiality'. It is widely used in ancient Greek literature with implicit and explicit philosophical repercussions that Aristotle will devote two books of his Metaphysics to discuss the various assumptions built into the term. When the noun is in the nominative, it is almost always translated as capacity. However, I will mention one special use of dunamis translated as 'power' and that is in mathematics. In Theaetetus, Theodorus the geometrician, is called to demonstrate before Socrates the mathematical application of dunamis:

Theodorus here was demonstrating to us with the aid of diagrams a point about powers. He was showing us that the power of three square feet and the power of five square feet are not commensurable in length with the power of one square foot; and he went on in this way, taking each case in turn till he came to the power of seventeen square feet; there for some reason he stopped. (147d)

Later in the text within the same context *dunamis* is given a new application, that is, it is used to name the incommensurable lines.¹⁶

When *dunamis* is in the dative followed by the verb "to be"(*dunamei einai*), it is translated as potentiality. Evidence of this variation along with the expressions "kata *dunamin*" (κατὰ δὺναμιν), "para *dunamin*" (παρὰ δὺναμιν), "huper *dunamin*" (ὑπὲρ

¹⁶See *Theaetetus* 148a-b; also see translator's footnote #2.

δὺναμιν), which can also be understood as potentialities, is mostly located in Aristotle's works. There is a particular exception to this use. There are two references in the Platonic corpus, where the philosopher reserves *dunamei* for mathematical use: one in *Statesman* (266b3) to refer to "the diagonal that has the power of (*dunamei*) two feet and the other one in *Timaeus* (54b4-5) where "the [right-angled] isosceles, and [the right-angled] scalene whose longer side (*kata dunamin*) squared is always triple its shorter side squared (i.e., the half-equilateral]." Again in this specific case, the term gets translated as "power".

Dunamai and its derivatives are not the only terms used in the ancient Greek text to signify ability. The expression oion $te(0\hat{i}\hat{o}v \tau \epsilon)$ when followed by infinitive has the same meaning and use as dunamai and its derivatives. Its occurrence at least in the Platonic dialogues is not as frequent and it does not appear to have different implications and associations from the ones raised in the use of dunamis. Socrates uses it in the Ion to refer to the ability to know the ergon of each techne:

Then to each profession a god has granted the ability to know a certain function $[0i\alpha \ \tau \in \hat{i}\nu\alpha\iota \ \gamma\iota\gamma\nu\omega\sigma\kappa\in\iota\nu]$. I mean, the things navigation teaches us -we won't learn them from medicine as well, will we? (537c5-7; also in 538a6-8)

Another term that is often related to *dunamis* is *ischus* ($i\sigma\chi\dot{\nu}\varsigma$). The term derives from the stem $i\sigma\chi\nu$ - and is most commonly translated as strength. ¹⁸ Its relation to *dunamis*

¹⁷At this point I will not provide specific examples that illustrate the different translations in order to avoid becoming repetitious. Such examples will be used later in the subsequent discussion.

¹⁸Strength is often used to denote physical prowess. See, for instance, *Hippias Minor* 374aff. Also in the Pseudo-Platonic *Definitions*, there are two versions for the term *dunamis*. One is reserved to denote ability meaning "that which produces results on account of itself" (411b), and another one that discusses ability in terms of "superiority in word or deed; the

is that *ischus* emphasizes the factuality of the ability, or to use the Aristotelian terminology it is the first realization of a *dunamis*. To be more specific, according to Aristotle, when something is in first potentiality (*dunamis*) it can come to be in first actuality (*energeia* or *entelecheia*) which in turn is identical to second potentiality; once something is in second potentiality, it can come to be in second actuality. For instance, the statement "Maria knows geometry" involves two levels of manifestations of the two levels of *dunameis*. The first potentiality is that Maria can know geometry because she belongs to the class of beings that are "of such and such matter", 20 and is capable of actualizing various qualities amongst which is knowledge of geometry. When she actually learns geometry she manifests that first potentiality into a first actuality. The first actuality is at the same time a second potentiality, for since she has learned geometry she could solve a geometrical problem. When she actually solves a problem-second actuality-she exercises the second potentiality. Hence in both cases we have

potential knowers who realize their respective potentialities, the one by change of quality, i.e. repeated transitions from one state to its opposite under instruction, the other in another way by the transition from the inactive possession of sense or grammar to their active exercise. (On the Soul, II.5, 417a22-35)

Where does ischus fit in this picture? Take, for instance, someone who can wrestle

state which makes its possessor be able; natural strength" (416).

¹⁹I will be using the terms "is potentially F" and "has the potentiality to be F" interchangeably.

²⁰Aristotle repeatedly points out that matter is potentiality, whereas form is actuality, energeia (ἐνὲργεια): "Matter exists in a potential state (ὕλη ἐστι δυνὰμει), just because it may attain to its form; and when it exists actually, then it is in its form." (Metaphysics IX.8, 1050a15). Also see On the Soul II.1, 412a9, 414a15.

strongly. He can do that because he belongs to the class of beings that are "of such and such nature", namely, because of the "good natural condition and nurture of the body". When he learns how to wrestle strongly, he manifests the potentiality, the *dunamis* he has, and that manifestation is wrestling with *ischus*.

The same sort of implications between *dunamis* and *ischus* we find in the works of the early philosophers. In one of the fragments attributed to Diogenes of Apollonia, the thinker proposes a monistic world system where everything is a modification of a single basic substance, air. As the creative substance, air is a *dunastes* that has incredible *dunameis*:

Wind in bodies is called breath, outside bodies it is called air. It is the most powerful of all and in all (οὖτος δὲ μὲγιστος ἐν τοῖσι πᾶσι τῶν πὰντων δυνὰστης ἐστὶν), and it is worth while examining its power (ἄξιον δ΄ αὐτοῦ θεὴσασθαι τὴν δὺναμιν). (Hippocrates De Flatibus 3.15-18; translation adapted from the Loeb Library)

One of its *dunameis* is to create strong (*ischuros*) winds that uproot trees and create sea storms:

When therefore much airs makes strong winds $(\pi o \lambda \hat{\upsilon} \zeta \, \mathring{\alpha} \hat{\eta} \rho \, \mathring{\iota} \sigma \chi \upsilon \rho \hat{\upsilon} \nu \, \hat{\upsilon} \rho \in \hat{\upsilon} \mu \alpha \, \pi o \iota \hat{\eta} \sigma \eta)$, trees are torn up by the roots through the force of the wind, the sea swells into waves, and vessels of vast bulk are tossed about.

Here again ischuros is the first realization of a dunamis in the primary substance.

In conclusion, in this section I briefly looked into the etymology, the derivatives of the concept of *dunamis* and their meaning with the help of textual evidence from the ancient Greek literature. For the most part *dunamis* and its derivatives denote the thing's capacity or ability to do something. When the grammatical form of the term changes to the dative followed by the verb "to be", or accusative preceded by the prepositions "kata", "huper" and "para", its meaning changes to potentiality. I also argued that *dunamis* is a necessary

condition for *ischus*, in the sense that *ischus* is the second actuality of a *dunamis* in a substance.

For the purposes of this section, I have refrained from raising the different implications of the distinction between *dunamis* as the capacity to cause or suffer change and *dunamis* as potentiality (the being *dunamei*). Rather, I have been using both terms interchangeably, and wherever I saw it fit I briefly addressed the distinction. However, this distinction is quite important when it comes to the actual investigation of the textual evidence for assumptions of a pre-Aristotelian model of *dunamis*. Hence, in the subsequent section, I will briefly discuss the relationship between capacity and potentiality. For the most part the discussion will center upon the evidence provided from Aristotle, since he is the first philosopher who addressed this issue explicitly.

2.4 The *Dunamis* of the Being versus the Being *Dunamei*: Capacity versus Potentiality

In *Physics* (I.8.191a25-34), Aristotle, referring to the early philosophers, states "the first of those [early thinkers] who studied philosophy were misled in their search for truth and the nature of things" for they believed that it is impossible for what is to come to be or pass out of existence from both what is and what is not. Other thinkers, Aristotle continues in the beginning of *Physics* I.9, have attempted to resolve the challenge of coming to be posed by the Eleatics but inadequately. Namely, they allowed "that a thing may come to be without qualification from what is not" reasoning that "if it is one numerically, it must have also only a single potentiality (*dunamei*)" "which", Aristotle argues, "is a different thing"

(191b35-192a3). In short, Parmenides and his followers, as Aristotle puts it, failed to recognize one of the essential properties of being, namely its *dunamis* to be or become a certain way.²¹

Plato, on the other hand, according to Aristotle, resolves the riddle but only partly. For he may be able to explain how a thing may come to be out of that which is not; but his analysis does not adequately address the kind of not being out of which a thing may come to be. Rather, he assumes that a thing can be potentially (*dunamei*) nothing else but the thing it actually is. This, though, would not explain how water can be potentially wine or a living man can be potentially dead. In other words, Aristotle argues, Plato and his predecessors lack in their explanation the being *dunamei*²² as a way of being. Thus, a thing X can come to be from some Y that exists not as X but as X potentially. Thus the new use of *dunamis* and the solution to the Eleatic challenge:

Therefore not only can a thing come to be, incidentally, out of that which is not, but also all things come to be out of that which is, but is potentially [dunamei] and is not actually [energeia].²³ (Metaphysics XII.2, 1069b19-20)

²¹There is an isolated case in the works of the early philosophers where the potentiality to be a certain way is explicitly stated. Specifically, in a fragment attributed to the Eleatic, Melissus, by Aetius, the thinker is to have said that "everything is potentially (dunamei einai) corruptible. Since this fragment is testimonial, I have treated it with some caution. But if it is what Melissus actually said then it appears that Aristotle is not the first one to have pointed out the use of dunamis as potentiality.

²²Aristotle switches to the dative of the noun, as I have pointed out previously, to indicate the special use.

²³Aristotle's use of the terms *energeia* and *entelecheia* as opposed to *dunamis* is rather ambiguous. He distinguishes *energeia* from *entelecheia* the following way. *Energeia* is extended to imply action: "The word 'actuality' (*energeia*), which we connect with fullfilment (*entelecheia*), has, strictly speaking been extended from movements (*kinesis*) to the other things; for actuality (*energeia*) in the strict sense is identified with movement."

Aristotle's new use of *dunamis* is closely related to the original sense of *dunamis* viewed as capacity. In fact, it has been suggested that potentiality is focally²⁴ related to capacity, so that a thing that is potentially X has the capacity to be or become X.²⁵ Textual evidence in *Metaphysics* IX suggests that he recognizes this kind of relationship between the two senses of *dunamis*:

... not everything can be healed by the medical art or by chance, but there is a certain kind of thing which is capable of it (dunaton estin), and only this is potentially (dunamei) healthy. (1049a3-5)

This will explain the potentiality a thing has to change in the absence of external objects and equally, the potentiality it has to change in the absence of internal obstacles:

⁽Metaphysics 1047a3-35). Etymologically, the term strictly means activity, notwithstanding Aristotle mistakenly derives it from ergon: "the action is the end, and the actuality is the action. Therefore even the word 'actuality' is derived from 'action' and points to the fulfillment [τὸ γὰρ ἔργον τὲλος,ἡ δὲ ἐνὲργεια τὸ ἔργον. διὸ καὶ τοὕνομα ἐνὲργεια λὲγεται κατὰ τὸ ἔργον, καὶ συντεὶνει πρὸς τὴν ἐντελὲχειαν]." (Metaphysics IX.8, 1050a15-16) On the other hand, entelecheia which signifies completeness, fulfilment, Aristotle identifies with actuality. Despite the difference in meaning, he does not assign them to terminologically two different kinds of dunamis. Furthermore, he does not always keep the distinction sharp; rather, he uses them interchangeably. For more on energeia and entelecheia, see Bonitz, H. Index Aristotelicus. Secunda editio. Graz: Akademische Druck, 1955, pp. 253-254; Menn, S. "The Origins of Aristotle's Concept of Ένὲργεια: Ένὲργεια and Δὺναμις" in Ancient Philosophy, vol.14, 1994, pp. 74-78.

²⁴In focal meaning, there is a central use of a specific kind of thing to which many of its different senses may stand to some relation. Take, for instance, diet, exercise, and a person all in some way being related to health. The central use of 'health' is the state of a thing to be healthy. Diet is focally related to health because it tends to produce it, exercise because it tends to preserve it and a person because it is capable of it. The crucial text in support of this is in *Metaphysics* IV.2, where Aristotle admits that many other words may be treated similarly: "There are many senses in which a thing may be said to 'be', but they are related to one central point, one definite kind of thing, and are not homonymus. Everything which is healthy is related to health, one thing in the sense that it preserves health, another because it is capable of it." (1003a32-37).

²⁵Ide, H. "Dunamis in Metaphysics IX". In Apeiron, vol.26, 1992, pp. 4-6.

And the definition of that which as a result of *thought* comes to be in fulfillment from having been potentially is that when it has been wished it comes to pass if nothing external hinders it, while the condition on the other side-viz. in that which is healed-is that nothing in it hinders the result. (*Metaphysics* IX.7, 1049a5-8)

One final observation is that potentiality has not been the only concept linked to capacity. Aristotle, in his earlier writings, *De Caelo* (I.9, 279a11-18) and *Physics* (IV.14, 223a21-29) implied a distinction between capacity and possibility. Briefly, he claims that there is no countability if there is no one to count²⁶ and there is no body outside heavens since there is nothing out there in which it is possible (*dunaton*) for there to be body. Many ancient²⁷ and modern²⁸ commentators have accused Aristotle for failing to recognize the distinction between something having the capacity to be counted or receive body from something being possible of counting in the absence of a counter or being possible of body outside heavens. Whether his critics have been correct in interpreting his view is a wholly different issue that goes far beyond the aim of this section. At this point it only suffices to

²⁶In the *Categories* he argues for exactly the opposite position; namely, if there were no animals in existence to know and perceive, knowables and perceptibles would still exist: "Take for example, the squaring of the circle, supposing it to be knowable; knowledge of it does not yet exist but the knowable itself exists. Again, if animal is destroyed there is no knowledge, but there may be many knowables (*episteta*). The case of perception is similar to this; ... For if animal is destroyed perception is destroyed, but there will be something perceptible (*aistheta*), such as body, hot, sweet, bitter, and all the other perceptibles." (7, 7b32-8a6)

²⁷See for instance the Stoics' response such as Philoponus (An. Pr. 169.20), Simplicius (Cat. 196, 1) where they say that a thing can be combustible or perceptible at the bottom of the sea, in virtue of the 'bare fitness' (psile epitedeiotes) of the thing. Also Cleomedes' response in *De Motu Circulari Corporum Caelestium*.

²⁸Ide, H. "Dunamis in Metaphysics IX". In Apeiron, vol.26, 1992, pp. 6-18; Sorabji, R. Time, Creation and the Continuum: Theories in Antiquity and the Early Middle Ages. Ithaca, New York: Cornell University Press, 1983, pp. 90-93.

say that Aristotle had to entertain these three concepts and their interrelations, first, because they are important in laying the foundations for his science of physics and second, because they help him explain away the possibility of contraries and contradictories existing concurrently.

To summarize, one of the several senses *dunamis* is used for is to signify capacity (the ability to do) and potentiality (the ability to be); the latter is developed and exclusively discussed by Aristotle. The textual evidence from *Metaphysics* also suggests that Aristotle recognized an association between the two senses; namely, that potentiality is focally related to capacity, so that if some thing is potentially X it also has the capacity to be or become X.

2.5 Conclusion

In this chapter I addressed three specific issues regarding the concept of *dunamis*. First, I looked at the role of *dunamis* into the ancient philosophic writings. Secondly, since the interpretation and analysis of the evidence clearly relies on the grammatical form of the term as well, I discussed the etymology, the various derivatives and their meanings using textual evidence from the ancient Greek literature in general. This discussion yielded the two most philosophically important derivatives, namely, *dunamis* as a capacity and as potentiality. The relationship between these two concepts I took up in the final section.

My inquiry with respect to the above questions yielded the following. Upon observing their environment, ancient Greeks noticed that things were undergoing change. To philosophically explain the phenomenon, they had to give the object that was initiating or suffering the change an attribute that would enable this kind of activity. That attribute was

dunamis. Originally, it signified the capacity to cause or suffer change. However, dunamis as a capacity alone did not capture a certain kind of event. Reason has it, as Aristotle says, that the actuality of a thing comes out of what that thing is potentially, hence, the second and more important use for Aristotle's metaphysical agenda, namely, dunamis as potentiality. For the second use the philosopher uses a specific grammatical form; that is, the dative of the noun followed by the verb "to be" and the accusative preceded by the prepositions "para", "kata" and "huper". The two terms are related focally meaning that if a thing is potentially X it also has the capacity to be or become X. These attributes, quite essential to his metaphysical agenda, will become the backbone of his theory of dunamis.

The above specialized sense of *dunamis* and its relation to the original, Aristotle argues, was not stipulated by his predecessors' treatment of *dunamis*. Is Aristotle right in believing that it was not at least tacitly known to the early philosophers? This is one of the questions that I address next. Specifically, in the next chapter I argue that some of the features of the Aristotelian *dunameis* were either explicitly or implicitly stated in the writings of the Presocratics. Indeed, the early philosophers did not explicitly make a distinction between the two senses of *dunamis*. The sense they mostly referred to was an active or a passive power, that is the ability to do or suffer something. However, the language suggests that they might have been aware of *dunamis* as potentiality and its relationship to capacity.

CHAPTER 3

Pre-Socratic Traces of Aristotelian *Dunameis*

3.1 Introduction

In Metaphysics IX.1, Aristotle claims that "that which is" (τὸ ὄν)

is in one way divided into 'what' (τὸ τὶ), quality (ποιὸν), and quantity (ποσὸν), and is in another way distinguished in respect of potentiality (κατὰ δὺναμιν) and fulfillment (ἐντελὲχειαν), and of function (κατὰ τὸ ἔργον). (1045b32-35)

The ascription of *dunamis* to being is quite essential for Aristotle; indeed, any meaningful discussion regarding "that which is" will have to include a discussion on the concept of *dunamis*. It is a mere fact of reason, as he says, that "the actuality of any given thing can only be realized in what is already potentially the thing." (*On the Soul*, II.2, 414a25-27). Hence, he will have to investigate, as he readily admits in *Metaphysics* IX.1, the different senses of the term that are derivatives of "the formula of potentiality in the primary sense." (*Metaphysics* IX.1, 1046a1-16).

This is exactly what Aristotle does in *Metaphysics* V.12 and IX.; he investigates the fundamental features of the term *dunamis*, which can be translated as 'capacity', 'power', 'ability', or 'potentiality'. Primarily, he distinguishes between the non-rational *dunameis* that are "present in soulless things", and the *dunameis* accompanied by reason that are present in "things possessed of soul and in the rational part of the soul". (*Metaphysics* IX.2, 1046a1-5). For both kinds Aristotle recognizes two uses. The first use, which he considers to be a narrow and primary one, addresses the *dunamis* or capacity of something to change, move, and cause change:

Capacity (dunamis) then is the source $(\alpha \rho \chi \dot{\eta})$, in general, of change $(\mu \in \tau \alpha \beta o \lambda \dot{\eta} \zeta)$ or movement $(\kappa \iota \nu \dot{\eta} \sigma \in \omega \zeta)$ in another thing or in the same thing qua other, and also the source of a thing's being moved by another thing or by itself qua other. (Metaphysics V.12, 1019a18-20; also in IX.1-5)

The second and broader use takes *dunamis* as a way of being something, that is some thing's being potentially (*dunamei*) something. For instance, "wood is potentially (*dunamei*) a casket" (*Metaphysics* IX.7, 1049a19-20), and a man is potentially (*dunamei*) a musician (IX.8, 1049b26). These two senses, though they address different activities, appear to be focally related as Aristotle suggests in IX.7, 1049a3-5:

... not everything can be healed by the medical art or by chance, but there is a certain kind of thing which is capable of it (*dunaton estin*), and only this is potentially (*dunamei*) healthy.

Namely, a thing that is potentially healthy has the capacity to be or become healthy.

These fundamental features of *dunamis* that comprise the backbone of the Aristotelian theory of *dunamis*² were already present in the philosophic tradition that preceded Aristotle's. In what follows, then, I argue that

- **D1.** the distinction of being between its function (ergon) and its dunamis,
- **D2.** the distinction between rational and non-rational dunameis,

¹According to focal meaning, there is a central use of a specific kind of thing to which many of its different senses may stand in some relation. The crucial text in support of this relation is in *Metaphysics* IV.2 where Aristotle explicitly states that "there are many senses in which a thing may be said to 'be', but they are related to one central point, one definite kind of thing, and are not homonymous. Everything which is healthy is related to health, one thing in the sense that it preserves health, another because it is capable of it." (1003a32-37)

²The Aristotelian account on the concept of *dunamis* is far more complex than what I portrayed it to be in the brief introduction above. Aristotle exclusively discusses the details of each use in *Metaphysics* V.12 and IX.1, whereas supporting evidence can also be found in the *Categories* 7, 7b32-8a6, *De Caelo* I.9, 279a11-18, *Physics* IV.14, 223a21-29. However, for the purposes of this paper it only suffices that I draw attention to the general features of the term.

- **D3.** the fundamental feature of *dunamis* as the capacity to change, move and cause change,
- **D4.** the fundamental feature of *dunamis* as the potentiality to be or become something,
- **D5.** and the relation between capacity and potentiality is that something is potentially capable to be or become something

can be traced back to the writings of the Presocratic philosophy³. Furthermore, tracing the features of *dunamis* will also reveal its role in the Presocratic literature and its philosophical development. In the subsequent sections it will also become evident to the reader that the early philosophers do not aspire to establish a theory of *dunamis*; their concern was merely to abandon the mythopoetical elements of the existing cosmologies and provide a rational explanation for the *genesis* of the *kosmos*. So, at best what they say or assume about *dunamis* can only constitute the embryonic stages of a theory of *dunamis*.

This exposition will focus on two groups of thinkers. The first group includes the two epic poets, Homer and Hesiod, whom I call the 'forerunners of philosophy'. Within this group I will briefly refer to the "Orphic poems" that were attributed to Orpheus and circulated as early as mid-sixth century B.C. in ancient Greece. Traces of their theogonic-cosmogonic narrative can be found in the Pythagoreans or even in Plato's *Phaedo* and his doctrine of the immortality of the soul. The second group will be primarily a cluster of philosophers that were either Socrates' contemporaries or came before him and whose

³By this I do not claim that Aristotle has ignored the influences of his predecessors on his philosophy. On the contrary, in several of his works he pays tribute to those who have paved the way for his own inquiry. See, for instance, *Metaphysics* I.4 984b23-30, where he claims that Hesiod might have been the first thinker to come up with the idea of the "efficient cause". Rather, the goal of this chapter is to draw attention to specific evidence upon which Aristotle relied to formulate an actual theory of *dunamis*. For more on the topic, see chapter 1, section 1.3.

pioneering contributions to rationally understand the cosmos laid the groundwork for later thinkers to describe it more specifically. For both groups the universe was a dynamic one; a multitude of *dunameis* present in both animate and inanimate objects were the facilitators of change either in the thing itself or in another thing.

3.2 The Mythologists: The Forerunners of Philosophy

As I have already argued the works of the epic poets were not clearly perceived as philosophical. Aristotle places them among the forerunners of philosophy, since he considers that "even the lovers of myth are lovers of wisdom". Several times he mentions both Homer and Hesiod by name and uses their views on cosmogony as a reference point for his own theories.

Greek epic poetry went through three stages of development, maturity and decline. Preserved records exist only from the second and third stage where Homer and Hesiod's poems were produced⁴. In both of Homer's poems *dunamis* appears only twelve times in the text.⁵ All of them are found either in the nominative or accusative form of the noun that do

⁴There are no fragments of the first period; reconstructed evidence from other forms of literature and the two Homeric epics reveals a gradual development of the epic metre and diction from crudity to maturity by the time of Homer. Hesiod's poems are the products of the third period of epic poetry. He is the representative of a tradition found in Boeotia, Locris and Thessaly. Unlike the trend in Ionia and the islands that follows the Homeric tradition, Hesiod gives birth to a new epic form which is more focused on practical matter-of- facts such as the genealogies of man, agriculture, astronomy. He will abandon this style of poetry and gradually change it to one with more dramatic elements as seen in *The Sheild of Heracles*.

⁵In *Odyssey*: books 2.62, 3.205, 10.69, 20.237, 21.202, 23.127. In *Iliad* books: 5.475, 8.295, 13.785 and 787, 22.20 and 23.890.

not carry the special meaning the dative form does. Several times, in the usual Homeric fashion, the term is used in fixed phrases that appear in one or both poems⁶. And in almost all cases, the Homeric *dunamis* is understood as physical strength⁷.

In all of the references, *dunamis* is used to denote capacities that humans and their anthropomorphic counterparts, the divinities, have. According to the Homeric model, *dunamis* is the state that lends equally humans and gods the ability to do something. Hence, Achilles praises the superb ability Atreus' sons has to throw the spear: "Atreus' sons, we know how far you surpass all others in your power, how great a spearman" (*Iliad*, 23.890). Whereas, the Homeric gods have various *dunameis* among which is the ability to bestow *dunameis* on humans. In one case, Telemachus tells Nestor that he hopes the gods will give him the strength to avenge the wrongdoer: "O that the gods would clothe me with such strength, that I might take vengeance on the wooers for their grievous sin." (*Odyssey*, 3.205).

Philosophically, there is not much of a difference in Hesiod's poems regarding the treatment of *dunamis*. There are only three instances of the term in all of his works. Similar

⁶The phrase 'while our strength stays with us (hose dunamis ge paresti)' is repeated in *Iliad* 8.295, 13.785; in *Odyssey*2.62, 23.127. The same exact phrase appears in Hesiod's *Theogony* 418. A slightly different version of the above statement 'if I could and had the strength (ei moi dunamis ge pareie)' is found in *Iliad* 22.20 and *Odyssey* 2.62 as well.

⁷It is worth noting here, that although ancient Greeks had reserved a specific term for strength (*ischus*), nowhere in the Homeric text does the actual term, *ischus*, and its derivatives appear. The first three instances of *ischus* alone and no other forms appear in Hesiod's *Theogony* 153, 823, 146.

⁸The view that gods distribute *dunameis* to humans is also revived in the myth of Protagoras in *Protagoras* 320c9-322a3.

⁹See Hesiod, Shield of Heracles 354; Theogony 418, Works and Days 336.

to the Homeric assertions, *dunamis* is equally a characteristic property of humans and the divine and denotes the ability to change or cause change. For instance, the gods, who continue to be anthropomorphic, following the Homeric motif, have powers to do things. Hence, Hecate has the power to bestow wealth upon those who have been generous in their ceremonial sacrifices in her honor:

For even now, whenever any one of mortal men makes a handsome sacrifice in propitiation, according to usage, he invokes Hecate, and recompense abundant and lightly granted befalls that man whose prayers the goddess receives with favor, and she grants him good success, for hers is the power to do this. (*Theogony* 415-420)

Unlike Homer and Hesiod's divinities who have *dunameis* and bestow them upon objects, in the so-called *Orphic Rapsodies*, *dunamis* is one of the Orphic deities. Namely, one of the three progenitors in the third stage of the Orphic theogonia, is *dunamis* represented by Erikepaios. (DK IB12). Unfortunately, there is not much that can be said from one single reference, other than the Orphic *dunamis* is some sort of creator and as such I can only assume it can bring about change.¹⁰

In conclusion, the goal of this section was to highlight and attempt a possible interpretation of the few instances of *dunamis* in what I refer to as the forerunners of philosophy. I admit from the onset, my interpretation suffers from the problems any other

¹⁰As I have already mentioned in the first chapter, Orpheus' existence has been debated by the ancients; Aristotle, for instance, did not believe he existed. The Orphic literature is thought to be a collection of writings of different periods and perspective, dating from sixth century B.C. The main reason I decided to include it in this exposition is because in the only reference that *dunamis* is brought up it is used not as a specific property of a substance but is given the role of a divine ancestor. This basic Orphic idea that dunamis is an agent and not simply a property of a thing will be revisited in Empedocles' view about the two *dunameis*, Love and Hate.

that the poets' description of the people, their passions and travails, their understanding of the surroundings incidentally brought into the picture the term *dunamis*. These *dunameis* are restricted only to humans and their anthropomorphic counterparts, the gods. Primitive in the philosophical sense, the term explicitly or implicitly is only used to show the ability to change or suffer change, which captures Aristotle's strict use of the term.¹¹

This scenario slightly changes when we move to the presocratic philosophers. Dunamis becomes the central theme in their philosophies. It is either the underlying cosmic principle that can be applied over a whole range of things, one of the primary agents that sets the kosmos in a harmonious motion, or it becomes one or the main characteristics of animate and inanimate objects. To be more specific, in what follows, I will selectively discuss some of the early philosophers' assumptions about the term in an effort to show the gradual development from its crude beginnings to a philosophically significant concept.

3.3 The Early Philosophers

I will start this investigation with the founder of western philosophy and scientific culture, and the only Presocratic to be named one of the Seven Sages, Thales of Miletus. From the few preserved fragments, Thales appears to propose a universe where everything consists of soul, and thus things that are normally thought to be inanimate in his view have

For Homer human *dunamis* is identified with physical strength in the absence of a specific term for the actual quality. The two terms are distinguished for the first time in Hesiod's works with the indirect implication that strength might be the factuality of a *dunamis*, or to use the Aristotelian terminology, the first actuality of a *dunamis*.

life. As a consequence, since soul pervades all things, all things then are full of gods (daimonon):

Some declare that it [the soul] is mixed in the whole [universe], and perhaps this is why Thales thought all things are full of gods." (Aristotle, *On the Soul* 1.5, 411a7-8) 12

The governing element with which the soul and thus the divinities set the universe in motion is water. Water is the primary source or the element (στοιχειὼδους ὑγροῦ) out of which all physical things are made. Water has divine qualities one of which is the *dunamis* to move. In a fragment by Aetius (I.7, 11), Thales is said to have claimed that water has *dunamis kinetiken*, that is the *dunamis* to move; this is, actually, the first time in philosophical literature that *dunamis* is clearly connected with mobility (*kinesis*), which is one of the first uses Aristotle considers for *dunamis*. Unfortunately there is no further evidence other than what has been said above that can provide any firm ground to understand all the specifics of *dunamis kinetiken*.

In the Pythagorean cosmology dunamis plays a more prominent role. It makes its

¹²For a detailed explanation how Thales relates the ideas that soul pervades everything and that all things are full of gods, see McKirahan's commentary in McKirahan, R.D. *Philosophy Before Socrates*. Indiana, Indianapolis: Hackett Publishing Company, Inc., 1994, pp. 30-31.

¹³It is not clear whether Thales held either that all things are made of water or that water is the source of all things. Holding the former would be more problematic, since he would have to explain the existence of things that oppose water. For more on this see Kirk, G.S., Raven, J.E., Schofield, M. *The Presocratic Philosophy*. Second Edition. Cambridge, New York: Cambridge University Press, 1983, pp. 90-94.

¹⁴For ancient Greeks the main features of the divine are immortality and powers that extend beyond the human scope. Aristotle in *Metaphysics* 1.3 983b6 explains why water was thought to be of divine nature; actually most of his reasoning on this subject matter, by his own admission, is conjectural.

appearance in connection with the most fundamental element of their cosmology, i.e. Number.¹⁵

Philolaos is the first of the two Pythagoreans¹⁶ whose preserved fragments explicitly relate *dunamis* to number. In a genuine Pythagorean fashion, Philolaos conceives Number to be the cosmic principle that entails an effective force (*dunamis*) which permeates all things. He holds *dunamis* to be in the Decad (*en te decadi*), and that the essence (*ousia*) and function (*ergon*) of Number are dependent upon that *dunamis*.

One must study the activities (ergon) and the essence (ousia) of Number in accordance with the power (kattan dunamin) existing in the Decad (Tenness); for it the (the Decad) is great, complete all achieving, and the origin of divine and human life and its Leader; it shares ... The power (dunamis) also of the Decad. Without this, all things are unlimited, obscure and indiscernible. (DK 11//I, 313f)

We get an insight how *dunamis* is used here by first looking at the grammatical form of the term in the text. In effect, there are two variations. According to the first one, *dunamis* is in the nominative which denotes in general a thing's capacity to do something, and in this particular case it signifies the Decad's capacity to bring things into existence, make them apparent:

And you may see the nature of number and its power at work not only in supernatural and divine existence but also in all human activities and words everywhere, both throughout technical production and also in music. (DK 11//I, 313f)

¹⁵ Besides the role of Number, for instance, the number ten (Decad) in Philolaos' system, the Pythagoreans worked on the harmony of the spheres. Also all of them rejected the geocentric system, with the exception of Ecphantus who has the earth standing at the center of the universe.

¹⁶He flourished in the second part of the fifth century B.C. It has been alleged that he was the first to have published a book on the Pythagorean doctrines.

On the other hand, *dunamis* is used in a more specialized sense; it is part of an expression, *kattan dunamin*, which merely denotes potentiality.¹⁷ Support for this approach is implicit in the wording of the above fragment where "one must study the activities and the essence of Number in accordance with the power existing in the Decad". It is in the essence (*ousia*) of the Decad, then, to be potentially capable of producing an *ergon* pertaining to animate and inanimate substances. Philolaos' language here is reminiscent in a rather crude way of Aristotle's division of being with respect to its function (*ergon*) and potentiality (*dunamis*).

Ecphantus, the Pythagorean from Syracuse,¹⁸ uses *dunamis* in a slightly different manner. He starts his account by admitting from the outset that we cannot attain true knowledge of things, and then he proceeds to give his account of the origin of the universe. His *kosmos* consists of the originally indivisible bodies (*somata*) out of which the sensible objects come, and the soul that sets these bodies in motion. *Dunamis* is one of the three variations of the indivisible bodies, size and shape being the remaining two:¹⁹

One Ecphantus, a native of Syracuse, affirmed that it is not possible to attain a true knowledge of things. He defines, however, as he thinks, primary bodies to be indivisible, and that there are three variations of these, viz., size, figure, capacity, from which are generated the objects of sense. But there are a

¹⁷The same expression we come across in Aristotle's *Metaphysics* IX.1 1045b32, which gets translated as potentiality.

¹⁸There are no known writings by him. Any evidence of his views comes either from Hippolytus, a third century A.D. theologian, and his work *Refutations of All Heresies* or from Aetius.

¹⁹The basic idea here is that the unlimited and indivisible have a temporal as well as a spatial aspect. To further explain away the apparent contradiction would involve a detailed discussion of the Pythagorean system and this is not the time nor the place to do it. For more on the topic see McKirahan, R.D. *Philosophy Before Socrates*. Indianapolis, Indiana: Hackett Publishing Company, Inc., 1994, pp. 79-115.

determinable multitude of these, and that this is infinite. And that bodies are moved (kineisthai) neither by weight nor by impact, but by divine power $(\dot{\upsilon}\pi\dot{o}\,\theta\in\dot{\iota}\alpha\zeta\,\delta\upsilon\nu\dot{\alpha}\mu\in\omega\zeta)$, which he calls mind and soul; and that of this the world is a representation; wherefore also it has been made in the form of a sphere by divine power. And that the earth in the middle of the cosmic system is moved round its own center towards the east. (Hippolytus Refutations, I.15)

Dunamis in Ecphantus' system has a several purposes. On one hand, it appears to be one of the three properties of the primary bodies (somata). It is also the source of change, though not explicitly stated, since it is one of the sources of generating the sensible objects. Then, there is the divine dunamis which he calls "the mind" or "the soul". From the fragment above it is not as clear whether in the realm of this divine dunamis there exists a real world out of which the world we live in is a representation ($i\delta \delta \alpha \nu$); or the divine dunamis is permeating every thing in the actual world and thus there is a representation of this dunamis in some form in every thing in the world. Whichever scenario applies one thing is clear, namely that the divine dunamis is responsible for motion (kinesis); it sets the bodies in motion and it is responsible for creating a world in the shape of a sphere.²⁰

Ecphantus is not the first one to make *dunamis* the chief character in his story. Empedocles, the first philosopher to reconcile the Eleatic and Heraclitean philosophy, ²¹ chooses a similar avenue. His account of *dunamis* is more substantial in that it plays more

²⁰Besides Ecphantus' laconic description of the soul, relying on reference from the Pythagorean writings, I will assume that he means it is of the same kind as the divine *kosmos*, namely a *harmonia* of numbers.

²¹He adopts the qualities of the Parmenidean *being* by making his four "roots" immortal, indestructible, and qualitatively unchangeable. To account for change, he has the primordial elements constantly mix and separate without suffering any qualitative changes themselves, contrary to the Heraclitean system where one element transforms into another in such a process.

of a pivotal role in his cosmology. The relevant evidence comes from a poem he wrote "On Nature". The poem investigates questions pertaining to the nature of the compounds out of which the different animate and inanimate objects come to issues relating to perception, cognition and epistemology.²²

The protagonists of the various processes in the Empedoclean *kosmos* are the four elements, ²³ earth, air, water, fire, and the two original *dunameis*, Love and Strife.

Empedocles of Acragas, the son of Meton, claims there are four elements (stoiheia), fire, air, water, earth and two original powers (ἀρχικὰς δυνὰμεις), Love and Strife, of which one [Love] unifies, the other [Strife] separates. (Aetius, I.3.20)

Elemental in their nature, the four roots are eternal and they do not undergo any kind of change, that is, they do not come to be or suffer destruction. However, they come to mix and form mortal compounds which unlike their progenitors come to be and suffer destruction: "Immediately things became mortal which formerly had learned to be immortal, and things previously unmixed became mixed, interchanging their paths." (DK 31B35) This fundamental process of mixing and dissolving of the original elements to form compounds is only possible by the intervention of the two original dunameis, Love and Strife respectively:

²²Empedocles' fragments constitute the largest amount of surviving fragments from any other Presocratic philosopher. He wrote on various subjects ranging from tragedies to medical treatises. The poem I mention in the main text is where he expounds his views on cosmology and it is of the most philosophical importance regarding my investigation on dunamis.

²³Empedocles' actual word is *rizomata* (ριζώματα) which literally means 'roots'. Using this specific term, Empedocles wants to emphasize that the four elements are fundamental and irreducible and like the roots of a plant they are the source for everything else that is formed.

In Anger they are all separate and have their own forms, but they come together in Love and yearn for one another. For from these come all things that were and are and will be in future. (DK 31B21)

Empedocles' treatment of the concept of *dunamis* raises several interesting points.²⁴ These will be tied into the assumptions he makes about the functions of the original *dunameis*, since there is no evidence to show that he uses any other *dunameis* in the different stages of his cosmology²⁵. First it is not clear at all what the nature of the two *dunameis* is. On one hand, the text implies that they have an immaterial nature; that is, the compounds are composites of the four elements alone and not the four elements and the two *dunameis*:

They [i.e. the four elements] dominate in turn as the cycle revolves, and they decrease into one another and grow in their turn, as destined. For there are just these things, and running through one another they come to be both humans and the tribes of other beasts at one time coming together into a single *KOSMOS* by Love and at another each being borne apart by the hatred of Strife, until they grow together into one, the whole, and become subordinate.(DK 31B26)

On the other hand, he appears to ascribe to them attributes that are usually assigned to material objects.

I will tell a double story. For at one time they grew to be only one out of many, but at another they grew apart to be many out of one: fire and water and earth and the immense height of air, and deadly Strife apart from them, equal in all directions and Love among them, equal in length and breadth. (DK 31B17; emphasis mine)

Their materiality is further supported when he assigns them to different spatial locations

²⁴I owe most of the observations discussed in this section to the helpful comments McKirahan makes on Empedocles' philosophy. In McKirahan, R.D. *Philosophy Before Socrates*. Indianapolis, Indiana: Hackett Publishing Company, Inc., 1994, pp. 259-262.

²⁵Theophrastus, in his commentary on Empedocles' views on cognition and perception, discusses a different set of *dunameis* that are properties of the products of the mixture between the original elements and Love and Strife.

during the different stages of the genesis of the kosmos.

When Strife had reached the lowest depth of the vortex, and Love comes to be in the middle of the whirl, at this point all these things come together to be one single thing, not at once but willingly banding together, different ones from different places. (DK 31B35)

To continue the controversy, in one part of the poem Empedocles claims that the elements remain at constant mix or separation and do not fall back into their original state due to the constant presence of either Love or Strife respectively. In another part, though, his language suggests that both Love and Strife are the agents of the change in the original elements. For instance, very often he uses phrases such as "by the hatred of Strife", "By Love" or "in Love", "in Anger" all of which point to the view that *dunamis* is not a constituent but rather the outside agent that initiates the changes. But if this is the case, when the agent is not present, its effect ceases to exist; such a scenario though would be contradicting what he claims above, namely, that the elements never fall back to their original state but are in a constant mix. To avoid this, it seems the "constituent" interpretation to be more probable than its alternative.

Furthermore, seeing, as the Empedoclean account suggests, the two *dunameis* as the external source solely responsible for motion would be rather strange. This would require that his specific four roots are merely inert matter which would be at odds with the traditional view that understands change, and for that matter motion, as an inherent property of the primary substances.²⁶Aristotle, in an attempt to resolve the inconsistency, thinks that

²⁶See for instance the Pythagoreans who gave their primary substance, Number, the inherent property of motion due to a *dunamis*. The same holds for Diogenes of Appollonia whose air has the *dunamis* to move.

Empedocles' language suggests that either motion is a constitutive property of the four elements, "fire by nature is borne upwards", or that 'chance' and not Strife is responsible for the motion of the roots:

Aither was borne upwards not by Strife, but sometimes he speaks as if it happened by chance. For thus in its course it sometime chanced to meet with the other elements in this way, but often otherwise. And sometimes he says that fire by nature is borne upwards, but aither sank beneath the deep-rooted earth. (On Generation and Corruption, 2.6 334a1-5)

Plato also suggests chance to be a factor. But he also claims that each of these elements has an individual *dunamis* which along with chance initiate motion:

They maintain that fire, water, earth and air owe their existence to nature (physei) and chance (tyche), and in no case to art (techne), and that it is by means of these entirely inanimate substances that the secondary physical bodies-the earth, sun, moon, and stars-have been produced. These substances moved at random, each impelled by virtue of its own powers inherent properties (τὺχη δὲ φερὸμενα τῆ τῆς δυνὰμεως ἔκαστα ἑκὰστων ἡ), which depended on various suitable amalgamations of hot and cold, dry and wet, soft and hard, and all other haphazard combinations and inevitably resulted when the opposites were mixed. (Laws X, 889b; adapted from Trevor J. Saunders' translation)

It is not clear at this point if Empedocles meant to have both chance and the individual dunameis as elements in his cosmogony; or if these are a much later addition by Plato and Aristotle who might have had detected the potential inconsistency mentioned above. If the latter holds, any further consideration of those elements would be a mere anachronism.

For what it is worth, Theophrastus' account of Empedocles' views on sense perception and thought, involves other *dunameis* that arise from the mixture of the original elements.²⁷ For instance, when the mixture is of the right proportions and is in the tongue

²⁷It is not clear, though, if Empedocles had sensed the problematic nature of the interaction between the four elements and the two *dunameis* in his cosmology; thus, in his

then it gives rise to the *dunamis* of being a skillful orator or if the mixture is in the hands, the person is a skillful artisan:²⁸

But when the composition in some single member lies in the mean, the person is accomplished in that part. For this reason some are clever orators, others artisans; for in the one case the happy mixture is in the tongue, in the other it is in the hands. And the like holds true for all the other forms of ability $(\dot{o}\mu o \dot{o}\omega \varsigma \dot{o}' \, \ddot{\epsilon}\chi \epsilon \iota \nu \, \kappa \alpha \dot{\epsilon} \, \kappa \alpha \tau \dot{\alpha} \, \tau \dot{\alpha} \varsigma \, \ddot{\alpha} \lambda \lambda \alpha \varsigma \, \delta \upsilon \nu \dot{\alpha} \mu \epsilon \iota \varsigma)$. (On the Senses, 11)

Within the same context, Theophrastus objects that he finds this idea odd,

that the special abilities (*dunameis*) of men are due to the composition of the blood in their particular members,-as if the tongue were the cause of eloquence; or the hands, of craftsmanship; and as if these members did not have the rank of mere instruments. (24)

Again here it is unclear whether these *dunameis* are offsprings of the original ones, which would support the view that Empedocles intended the latter to be the primary constituents of the four roots; or whether *dunamis* is a temporal entity meaning that as long as the specific mixture exists, the existence of this particular *dunamis* is guaranteed; when the mixture is absolved then that particular *dunamis* ceases to exist.

Given these irregularities in his account, what are we, then, to conclude regarding Empedocles' treatment of *dunamis*? His account appears to entail several inconsistencies. The two *dunameis* are originally assumed to be immaterial entities yet in the same context

account of cognition and perception he amends it by ascribing further *dunameis* to the compounds. Or Theophrastus, being aware of both Plato and Aristotle's criticism, interjects his own solution.

²⁸I relate *dunamis* with 'being' rather than 'becoming' for in this particular passage the term is associated with the infinitive of the verb to be, *einai*, rather than *gignesthai* the infinitive of the verb to become. Whether Empedocles, assuming Theophrastus accurately reports on him, was aware of these subtle differences in the interrelations of the term is unknown.

they have material attributes. Their role is that of the external agent of motion, yet at places they are presumed to be constituents of the four roots. Is, then Empedocles guilty of philosophic carelessness? Is it even fair to require philosophic maturity from a thinker who, along with the undertaking of explaining away the mythopoetic elements of early cosmogony, is faced with the limitations of a language that is gradually developing philosophically? Or should we just simply see him in the light of a poet with a flair for philosophy and as such allowing him artistic licence is almost necessary?

These questions, though they do not have any specific answer, are not intended to undermine Empedocles' contributions to natural philosophy. The tension in his explanation of the *genesis* of the *kosmos* between the primary substances and the two *dunameis* will give Aristotle grounds for addressing a detailed account of the *dunameis* in inanimate and animate objects, what he calls rational and nonrational *dunameis*.

A challenge to the stationary Eleatic universe comes from the Atomists who focus on the more rudimentary level of elements in nature, the atoms. Their goal is to establish an atomic theory for every aspect of the world. Democritus continued the tradition his teacher, Leucippus, ²⁹ had started and addressed a wide range of physical phenomena from the macrocosmic to the microcosmic level, from cognition and thought processes to the functions of the five senses. ³⁰ Each phenomenon in the world is explained in terms of mobile

²⁹Leucippus' actual existence has been called in question. Epicurus reportedly denies his existence; whereas, Aristotle and Theophrastus consider him the founder of the atomic theory. See Burnet, J. *Early Greek Philosophy*. New York: The World Publishing Company, 1964, p. 330.

 $^{^{30}}$ Democritus calls a human being "a small (μικρὸς) kosmos" (DK 68B34). The assumption is that human and world functions are governed by the same principles. This idea

microscopic atoms. Every event and change in the phenomenal world can be reduced to changes in the behavior of the eternal and unchanging atoms. The use of these fundamental units leads to the following observations. First, change and motion are one of the principal characteristics of his cosmology. Secondly, the concept tied with these respective changes is that of *dunamis*. The latter becomes evident from Theophrastus' commentary on Democritus' system.

To make any discussion on the Democritean use of *dunamis* more intelligible, I will momentarily digress to briefly present his views on the soul.³¹ According to Democritus, the presence of the soul is what separates animate from inanimate matter. It is a material substance composed of atoms spherical in shape, not a surprising observation since everything is explained in terms of their atomic constitution. Thinking processes are not one of the primary functions of the soul; rather, the soul and the mind are one and the same thing:

Democritus roundly identifies soul and mind, for he identifies what appears with what is true -that is why he commends Homer for the phrase 'Hector lay with thought distraught'; he does not employ mind as a special faculty (dunamin tini) dealing with truth, but identifies soul and mind. (Aristotle, De Anima, 1.2, 404a27)

The same claim is made in the subsequent fragment with the reminder that the soul does not consist of different parts located in different areas of the body.³² The implication then appears

is also shared by Anaximenes who attempted to explain the human phenomena in terms of the cosmic phenomena and vice versa.

³¹My discussion of *dunamis* will be limited to the functions of the soul, since in the testimonials by Theophrastus and Aristotle *dunamis* appears only in reference to the functions of the soul.

³²Earlier in the text Democritus' views are being contrasted with Epicurus'whose soul consists of two parts, the rational being located in the chest cavity and the irrational part

to be that since it is not divided into many parts, it is not multi powerful (ou poludunamon [einai]). Rather, the soul is one undivided substance and it appears to be one single dunamis out of which the mind (to noein) and what appears to be (to aisthanesthai) come:

Democritus claims that the soul is not of many parts or of many powers (poludunamon), claiming that the mind and what appears to be are one and the same thing and that they come from one and the same power (dunameos). (Philop. De Anima, 12; translation mine)

Although the soul's location is in the head, soul atoms are scattered throughout the body responsible for the different movements of the body; the proposed motion appears to be produced by the contact of the soul atoms with the other atoms of the body. Besides motion, the soul is also responsible for sensation. Taste, being one of the five senses, involves direct contact of the sensed object with the body of the sensor; this contact in the usual fashion will be explained in terms of atomic shapes and arrangements. That is, the various tastes are related to the various atomic shapes (DK 68A129), and the various tactile properties with the various atomic arrangements (DK 67A14, DK 68A135). Democritus' association of the tactile properties with soul atoms was meant to explain, according to Theophrastus' evaluation of the philosopher's doctrines, the different *dunameis*³³ involved in savor; hence

scattered throughout the body. On the contrary, the Democritean soul is an undivided entity located in the head. (Actius, IV.4, 6)

³³The concept of *dunamis* surfaces in Theophrastus' critique of Democritus; nowhere in the other preserved fragments of the philosopher's views is there mention of the term. Due to lack of other references, then, I intend to discuss his critic with some caution. Nonetheless, if Democritus' intentions were indeed to elaborate on the *dunameis* using sensation, Theophrastus' critic provides some insightful comments on what the philosopher failed to notice in his explanation. Some of his points, actually, echo Aristotle's worries about his predecessors' inability to capture the special notion of *dunamis*, namely, "that a thing may come to be without qualification from what is not".

the difference in savor is explained in terms of the different *dunameis*, the different atomic arrangements, i.e. shapes, exhibit:

But perhaps this latter way of explanation too would be considered (as we said) to have the powers in view, since in accounting for the savor in this way Democritus believes that he is giving the reasons for the powers themselves, the reasons why one savor has the power of puckering, drying, and solidifying, another that of making smooth and even and restoring to normal, another that of separating out and loosening and so forth. (*De Causis Plantarum*, VI.2.1)

It is true then that if this is what Democritus intended to do by proclaiming the appropriate atomic arrangements for the various tastes, then, as Theoprhastus points out he has done a rather sketchy job: "when one attaches powers (dunameis) to figures and shapes the difficulties increase in magnitude and number." (3.1) One of the problems he notices is that Democritus' account does not fully explain how a dunamis can bring about two different, actually opposite actions. To use an example, sweetness is defined by its specific atomic arrangement, and as such it has a specific dunamis. As it is expected, organisms with tactile dispositions (diathesis) that exhibit the same atomic arrangement should be experiencing the same taste. However, this is not always the case. What is sweet to one organism, could be bitter to another; that is, the same shape in two different sense organs has the dunamis to produce the impressions of sweet and bitter. Democritus' account, though, does not explain whether this state of affairs is the product of more than one dunameis or an indication that the relevant dunamis fails to get fully actualized or even get actualized at all.

Aristotle addresses this challenge by making the crucial distinction between being as potentiality (*dunamei*) and being as actuality (*energeia*, *entelecheia*). In his own words, therefore not only can a thing come to be, incidentally, out of that which is

not, but also all things come to be out of that which is, but is potentially, and is not actually. And this is the 'One' of Anaxagoras; for instead of 'all things were together' and the 'Mixture' of Empedocles and Anaximander and the account given by Democritus, it is better to say all things were together potentially and not actually. (*Metaphysics* XII.2, 1069b15-25)

So far the aforementioned accounts on *dunamis* assume its existence merely due to the tangible effects it has on the things with which it interacts. None of these accounts have been able to say what a *dunamis* is. Apparently, it is a spurious entity, in that it does not have any shape or color, any sensible properties to help to determine its existence. It seems, then, that the only way to detect its presence is by inductively reasoning from its effects. This was first brought up by Diogenes of Apollonia.³⁴ Like any monist, he proposes a world system in the hope of avoiding the inconsistencies of a world with many and radically different entities interacting with each other such as Anaxagoras' system. In his world system, all things are modifications of a single basic substance, air. As the creative substance, air is a *dunastes* that has incredible *dunameis*:

Wind in bodies is called breath, outside bodies it is called air. It is the most powerful of all and in all (οὖτος δὲ μὲγιστος ἐν τοῖσι πᾶσι τῶν πὰντων δυνὰστης ἐστὶν), and it is worth while examining its power (ἄξιον δ΄ αὐτοῦ θεὴσασθαι τὴν δὺναμιν). (Hippocrates *De Flatibus* 3.15-18; translation adapted from the Loeb Library)

These dunameis are not visible to sight, but as he clearly remarks they are visible to reason:

Such then is the power [of the air] that it has in these things [$\tau o \iota \alpha \upsilon \tau \eta \nu \dot{\epsilon} \nu \tau o \upsilon \tau o \iota \zeta \, \tilde{\epsilon} \chi \in \iota \, \delta \upsilon \nu \alpha \mu \iota \nu$], but it is invisible to sight $[\tau \hat{\eta} \, \mu \dot{\epsilon} \nu \, \check{o} \psi \in \iota \, \iota \lambda \nu \, \check{\epsilon} \nu$

³⁴Theophrastus considers him to be the youngest of the natural philosophers (Simplicius, A5), whereas Aristophanes, in his usual manner, ridicules him in the *Clouds* that he wrote in 423 B.C. All this points to his flourishing between 440-430 B.C. He was an eclectic thinker and writer. By his own account, he wrote a work *Concerning Nature*, *Meteorology*, a treatise *On the Nature of Man*, and a book *Against the Sophists* (Simplicius, A4)

 $\mathring{\alpha}$ φανης], though visible to reason [τ $\mathring{\omega}$ δὲ λογισμ $\mathring{\omega}$ φανερὸς]

Only to continue that the *dunamis* the air has can create strong winds that can uproot trees and create sea storms:

When therefore much airs makes strong winds $(\pi \circ \lambda) \zeta \dot{\alpha} \eta \rho i \sigma \chi \upsilon \rho \delta v \dot{\rho} \in \hat{\upsilon} \mu \alpha \pi \circ i \eta \sigma \eta$, trees are torn up by the roots through the force of the wind, the sea swells into waves, and vessels of vast bulk are tossed about.

Diogenes' account raises several interesting observations. First of all, air is not a dunamis; rather it has dunamis, which implies the capacity to move, though Diogenes does not explicitly say so. Secondly, dunamis is not an external agent which would create a problem given the nature of his primary substance. Hence, his making dunamis one of the necessary properties of air, Diogenes avoids the problems Empedocles' system has. Thirdly, it is worth noticing Diogenes' choice of words for the attributes of the primary substance. Air, he claims, is a dunastes, a derivative of dunamis, 35 because it has dunameis. It seems, then, that dunamis is a necessary and sufficient condition for being a dunastes. Finally, dunamis is a necessary condition for strength (ischuros); you need dunamis to be strong, but you do not need strength to be capable (dunatos). This last point is also raised by Plato in the Protagoras (350e-351a), where he explains that dunamis and ischus are two different entities and that the former is a necessary condition for the latter and not vice versa. He emphasizes the relation with an analogy, the gist of which is that as daring is to courage so is dunamis to strength; for all courageous are daring but not all daring are courageous.

³⁵For more on the derivatives of *dunamis*, see chapter 2.

I will conclude this investigation with Melissus, ³⁶ one of the representatives from the Eleatic school. The reason I have left him last is because of what he is alleged to have said about things in nature and *dunamis*. Melissus, following for the most part Parmenides' views on Being (to on), claims in this specific fragment that things in nature do not have a certain existence; rather, they are **potentially** (en dunamei) corruptible:

Melissus, the son of Ithagenes from Samos, said that the universe is one [εν τὸ πᾶν εἶναι], and that in nature nothing exists with certainty [μηδὲν δὲ δὲβαιον ὑπὰρχειν τῆ φὺσει] but everything is potentially corruptible [εἶναι φθαρτὰ ἐν δυνὰμει].

There is nothing wrong with this picture, since for Melissus the only thing that remains unchanged is Being. Anything else then will have to be subject to specific changes, which would imply the existence of *dunamis*. What is important, though, in this case is the special use that Melissus reportedly saves for *dunamis*, namely, potentiality.³⁷

As I have already mentioned in the beginning of this paper, Aristotle clearly makes the distinction between *dunamis* as capacity and as potentiality, since his plan is to discuss Being in those terms. If we take this fragment to accurately represent Melissus' position regarding things in nature, then it seems that the concept of *dunamis* as potentiality was already existent in the views of the early thinkers, though not laid out as elaborately as in Aristotle.

³⁶He was a commander of the Samian fleet that beat the Athenians twice. His philosophical endeavors are allied with the Eleatics, in fact he was reportedly a student of Parmenides. He agrees for the most part with him that the Being is eternal, indestructible, unchanging, and motionless, but he disagrees that it is in present and spatially limited. For him *to on* is temporally and spatially infinite.

³⁷Take special note in the grammatical form of the noun. Melissus chooses the expression "en dunamei" followed the infinitive of the verb to be to indicate the special use.

3.4 Conclusion

In this chapter I have argued that the fundamental features of Aristotle's theory of *dunamis* can be traced back to the early philosophers. These thinkers did not ask "What is a *dunamis*?" and they did not address any specific theory of *dunamis*. Nevertheless, from what they said, the term is evidently quite instrumental to what they set out to do.

Except for Homer and Hesiod, all of the aforementioned thinkers ascribed *dunameis* to animate and inanimate substances, a predecessor to Aristotle's intricate distinction between rational and non-rational *dunameis* (**D2**). Almost all of them understood *dunamis* as the capacity to change, move or cause change (**D3**) with the exception of Melissus, where he appears to introduce for the first time in philosophic literature the use *dunamis* as potentiality (**D4**).

In a more specific manner, in Homer and Hesiod's works, the *dunameis* are restricted only to humans and the anthropomorphic gods. The term, primitive in the philosophical sense, is only used to show the ability to change or suffer change. For Homer, human *dunamis* is identified with physical strength in the absence of a specific term for the actual quality. *Dunamis* and *ischus* (strength) are distinguished in Hesiod's works with the implication that strength might be what Aristotle calls the first actuality of a *dunamis*.

In Thales' cosmological system, *dunamis* for the first time in the philosophic literature is clearly connected with mobility (*kinesis*), which is one of the first uses Aristotle ascribes to the term. The Pythagorean Philolaos understands that the essence of the Decad is to be potentially capable of producing an *ergon* pertaining to animate and inanimate substances (**D5**). His approach reveals the embryonic stages of Aristotle's division of being

with respect to its function (ergon) and potentiality (dunamis) (D1). Empedocles treatment of the term is more detailed. Dunamis is the crucial protagonist of the various processes in the kosmos, since it is the facilitator of the fundamental process of mixing and dissolving of the original elements. It also appears, according to Theophrastus' account of Empedocles, that dunameis arise from the mixture of the original elements. For instance, the dunamis of being a skillful orator comes from the mixture of the elements in the right proportions in the tongue. Finally, according to the Atomist Democritus, dunamis is the protagonist in providing the appropriate atomic arrangements for the various tastes; however, his model fails to explain how a dunamis can bring about two actually opposite effects. This is one of the inconsistencies that Aristotle will addresses when he discusses dunamis as potentiality.

CHAPTER 4

Socratic Dunameis

4.1 Introduction

In the previous chapter, I discussed how *dunamis* factors in the early natural philosophers' accounts of the *kosmos*. In their attempt to rationally process their environment, they describe the universe either as a monistic entity or a multi-elemental one. Regardless of which of the above scenarios offers the most consistent explanation in sixth and fifth century B.C. ancient Greece, *dunamis* makes its mark as the common denominator in animate and inanimate substances; they both have *dunameis*. Leaving aside the lack of any proper definition of what *dunamis* is in the early thinkers' writings, one of its important features emerges: either an essential property of the primordial elements or a progenitor itself, *dunamis* is the instigator of movement and the facilitator of change. Thales' water has a *dunamis kinetiken*, the *dunamis* to move; whereas, Empedocles' four primordial roots (*rizomata*) undergo change due to the works of Love and Strife, the two original *dunameis*.

However, the fragmentary nature of the textual evidence only allows for a conjectural portrayal of the term. This changes in the Platonic dialogues. From its humble beginnings in the Presocratic accounts, *dunamis* gradually evolves into a more significant concept in the Socratic philosophy in the early Platonic dialogues. Socrates often brings *dunamis* into his

¹For one thing, the text is not fragmentary; the dialogues have come down to us in their entirety, quite an important fact especially when it comes to providing a substantial discussion of a spurious entity. Even in such a case, the interpretive analysis will be hindered by the possible adulterations the text might have suffered due to successive copying. Naturally, then, my account can only purport to approximate on an explanation as consistent as possible with the character and the philosophical worries of the protagonist as presented in the specific text.

discussions of animate, inanimate substances and abstract entities. Rarely, though, does he focus on the term itself. In one isolated case in the *Hippias Minor* (366b7-c3), he states that capable (*dunatos*) is someone who can do what he wants, when he wants, given the right circumstances. Other than that, Socrates uses the term in a variety of ways but does not explain in great details what it may entail. He does not discuss the concept exclusively, neither does he give any theory of *dunamis*. Any reference to the term is simply instrumental to his goals, be it morality or his alleged epistemological agenda. Fortunately, the existence of complete texts helps to reveal what Socrates might have had in mind when he was using the term *dunamis*.

It is the goal of this chapter to discuss the specific features of the Socratic *dunameis*. The text regarding the term reveals a substratum of principles that represent commonly used assumptions by the early philosophers as well. Hence, in the course of this chapter, in order to render this investigation more helpful, I will be asking the following questions: How much does Socrates borrow from the tradition available to him regarding the concept of *dunamis*? Does the script change under him? Does he add any new elements to what a *dunamis* can and cannot do? To provide meaningful answers to these questions, first I will address briefly what it is that Socrates does and does not do in the early dialogues. This will give the reader an idea why Socrates need not be accused of lack of interest or of philosophic ignorance when it comes to the specific details of the term.

²For more on the Socratic agenda in the early dialogues see the brief discussion that follows.

4.2 Socrates' Philosophic Agenda in the Early Dialogues

That Socrates is philosophically uninterested in *dunamis* is partly justified when we realize what he does and he does not set out to accomplish in the early dialogues. In what follows I will give a brief outline of what I think the primary goals of his philosophic enterprise are and how *dunamis* fits into these goals. The gist of this discussion will focus on three points: a. virtue is knowledge, b. knowledge is *dunamis* and c. Socrates' eclecticism when it comes to producing an account (*logos*) of the things (*onta*) of his inquiry.

To begin with, Socrates is neither a cosmologist nor a natural philosopher;³ this he appears to clearly deny in the *Apology* (19b-d) as one of the fabrications by his accusers:

Socrates is guilty of wrongdoing in that he busies himself studying things in the sky and below the earth. ... You have seen this yourself in the comedy of Aristophanes, a Socrates swinging about there, saying he was walking on air and talking a lot of other nonsense about things of which I know nothing at all. I do not speak in contempt of such knowledge, if someone is wise in these things-lest Meletus brings more cases against me-but gentlemen, I have no part in it, and on this point I call upon the majority of you as witnesses.

Undeniably, his primary concern is how one should live. He clearly states this in the *Apology* (29d2-e5) where he informs the jury of his lifelong mission that has eventually put his life at risk; namely, to examine the meaning of the god's oracle by investigating those who proclaim knowledge regarding "wisdom, truth and the best possible state of their soul." To accomplish his goal, he wanders in the agora mingling with people from various walks of life who profess knowledge on such matters: "After the politicians, I went to the poets, the

There is possibly a transition to natural philosophy in the *Phaedo*, where Socrates, in light of the Forms, discusses normative concepts as well as mathematical properties, such as Oddness and Evenness, and physical properties such as Hot and Cold. However, I take this dialogue to be one of the middle period where the views expressed are those of Plato's rather than of the historical Socrates.

writers of tragedies and dithyrambs and the others, intending in their case to catch myself being more ignorant than they are" (*Apology* b1-3).

What captures his attention mostly in this mission is his fellow citizens' moral behavior. In their everyday life they practice wisdom, temperance, justice, piety, etc., allegedly knowing what each of these virtues entails. To better understand the nature of virtue in general, Socrates embarks on a search, *elenchos*, that will make him the most infamous amongst his peers. Several instances of his *elenchos* reveal a peculiar relation between virtue and knowledge; that is, virtue in general or the specific virtues of temperance, justice, piety, wisdom and courage can simply be defined in terms of a specific kind of knowledge or of various kinds corresponding to the various virtues. Naturally, then, any moral shortcomings can solely be blamed on ignorance. The most outstanding instance amongst the early dialogues, where Socrates robustly admits that virtue is knowledge, is in the closing remarks in the *Protagoras*⁴:

It seems to me that our discussion has turned on us, and if it had voice of its own, it would say, mockingly, 'Socrates, you said earlier that virtue cannot be taught, but now you are arguing the very opposite and have attempted to show that everything is knowledge⁵-justice, temperance, courage-in which

⁴In other places in the early dialogues Socrates is not as explicit as above and his views with respect to virtue and knowledge are mostly reported in the form of questions that are put before the interlocutors. See, for instance, *Laches* 194d-e, 198-200, *Charmides* 165c, 167a1-7.

⁵Almost unanimously the majority of the Socratic literature argues that Socrates uses the words for "knowing" variably; thus, such words as *sophos*, *sophia*, and the verbs *gignosko*, *epistamai*, *epaio* and their cognates have been used in the text interchangeably to mean "knowledge"; for instance, in his response to Aristophanes' portrayal of his work, Socrates claims that "I know (*epaio*) nothing at all. I do not speak in contempt of such knowledge (*episteme*), if someone is wise (*sophos*) in these things." (*Apology* 19c,23a7; also see *Protagoras* 357-358, *Euthyphro* 12ff, *Charmides* 160ff). For relevant

case, virtue would appear to be eminently teachable. On the other hand, if virtue is anything other than knowledge, as Protagoras has been trying to say, then it would clearly be unteachable. But, if it turns out to be wholly knowledge, as you now urge, Socrates, it would be very surprising indeed if virtue could not be taught.'(361b; emphasis mine)⁶

Incidentally, how plausible such a position is remains questionable. Socrates appears to be convinced that once people acquire knowledge of virtue they will be able to tell the right thing and do the right thing under any circumstances. But this sounds counterintuitive. For instance, sometimes we do the morally wrong thing knowing it is the morally wrong thing and also knowing we can do otherwise. Unfortunately, incontinence and weakness of will are inescapable human-bound qualities. Surprisingly, though, Socrates fails to recognize

literature see Lyons, J. Structural Semantics: An Analysis of Part of the Vocabulary of Plato. Oxford: Basil Blackwell, 1963, especially his chapter on "The Meaning of techne, episteme, sophia, etc., in Plato" pp.139-228. Roochnik, D.L. "Socrates' Use of the Techne-Analogy." In Essays of the Philosophy of Socrates, edited by Hugh H. Benson. New York, Oxford: Oxford University Press, 1992, pp. 185-197, who claims that techne should not be translated as "craft" but simply as knowledge; Santas, G. "Socrates at Work on Virtue and Knowledge in Plato's Laches". In The Philosophy of Socrates: A Collection of Critical Essays, edited by G. Vlastos. Notre Dame, Indiana: Notre Dame University Press, 1980, pp. 177-208. One of the few who disagree with the above view, Lesher claims that the above terms cannot be used interchangeably salva veritate. He uses as an example the word sophia which he defines as expertise of high degree and as such it "may imply knowledge but not every piece of knowledge makes one expert". In "Socrates' Disavowal of Knowledge", Journal of the History of Philosophy, 1987, vol. 25, no. 2, pp. 275-288.

⁶The basic assumption that a person's morality is to be traced back to his/her intellect was not foreign to the Greek of that time. Aristotle testifies that virtue to the many is to be determined by correct reason which in turn expresses intelligence: "whenever people now define virtue, they all say what state it is and what it is related to, and then add it is the state that expresses correct reason (*logos*). Now correct reason is reason that expresses intelligence (*phronesis*); it would seem, then, that they all in a way intuitively believe that the state expressing intelligence is virtue." (*Nicomachean Ethics*, Book VI, 1144b20-25)

their role as intermediary steps between knowledge and action.⁷ As Grote summarizes the charge against the philosopher, "[Socrates committed] the error of dwelling exclusively on the intellectual conditions of human conduct, and omitting to give the proper attention to the emotional and volitional."

Socrates' intellectualist⁹ approach to virtues has not remained unanswered by his contemporaries either. Plato addresses the problem¹⁰ by advancing his theory of the tripartite soul-in his scheme the rational part of the soul is the entire soul for Socrates.¹¹ The

⁷To be more succinct, the philosopher recognizes that the majority of people blame "sometimes desire, sometimes pleasure, sometimes pain, at other times love, often fear" for any moral shortcomings. (*Protagoras*352b-c). On the contrary, he points out in the same work that any immoral behavior is due to ignorance. (360b-c)

⁸Grote, G. *Plato and the Other Companions of Sokrates*. Vol. I. London: John Murray, 1875, p. 399.

⁹For the label "intellectualism" check Gomperz, T. *Greek Thinkers: A History of Ancient Philosophy*, v.II. London: John Murray, 1913, pp. 66-71.

¹⁰Plato does not explicitly express this as a criticism against his teacher's view as far as the textual evidence goes.

¹¹There is also some textual evidence that Socrates might have considered that this knowledge may eventually be grounded in the soul. For instance, in the Laches (190b, 192ff) a specific kind of virtue such as courage is viewed as knowledge of a specific kind that can be attributed to a single state of soul; also in the Euthyphro (47a-48a) Socrates relates justice and injustice to the soul that can be harmed or benefitted by just or unjust actions. It is not clear, though, that he thinks of virtues as particular features of the soul. This would require a well-thought model of a soul structure which Socrates does not deliver; he does not appear to be interested in constructing a theory of psychology at least the same way Plato was interested. One could even argue that Socrates' hasty mention to the relation between virtues and the soul states might have prompted Plato to address his theory; the Socrates of the middle and late dialogues postulates the tripartite division of the soul, thus attributing the different virtues to the different structures of the soul (Republic, Books III, IV, i.e. 442d-443b). For more on the Socratic virtue with respect to tendencies and states see Irwin, T. Plato's Moral Theory: The Early and Middle Dialogues. Oxford: Clarendon Press, 1977, pp. 44-47; see also Lesher, J.H. "Socrates Disavowal of Knowledge". In Journal of the History of Philosophy, vol. 25, no. 2, 1987,

phenomenon of the weakness of will (*akrasia*), Plato explains away by blaming it on the two lower parts of the soul taking over the rational part or on a bad physical condition or bad upbringing. ¹² Aristotle, on the other hand, openly criticizes Socrates for failing to admit the role of *akrasia*. Like Socrates, he argues that, indeed, being a good person entails having some kind of knowledge, he calls it *phronesis* or practical wisdom, which itself involves reason; however, he disagrees with Socrates in that being virtuous does not only entail knowledge of a specific kind, but virtuous character as well:

Socrates, then, thought that the virtues are [instances of] reason because he thought they are all [instances of] knowledge (*episteme*), whereas we think they involve reason. What we have said, then, makes it clear that we cannot be fully good without intelligence, or intelligent without virtue of character." (Book VI, 1144b14-33)

Modern scholarship has also devoted time to understand Socrates' primary interest. Originally, his preoccupation with the search for morality has prompted several modern commentators to see him as a constructive thinker with positive contributions solely in ethical theory. ¹³ Such an approach, though, would be incomplete if not misleading, since the

pp. [275]-288; Penner also wonders "why couldn't Socrates have found possible the identifying of bravery with a psychic state", since "his pupil Plato identified bravery as a certain psychic state?" Penner, T. "The Unity of Virtue". In *Essays on the Philosophy of Socrates* edited by Benson, H.H. Oxford, New York: Oxford University Press, 1992, pp. 162-184.

¹²Sophist 227e-230e, *Timaeus* 86c-e, *Laws* 731e-734b.

¹³The leading view is expressed by Vlastos who portrays Socrates exclusively as an ethical theorist with no interest in epistemological questions or metaphysics. In 'Socrates' Disavowal of Knowledge' in *Socratic Studies* edited by Myles Burnyeat. Cambridge: Cambridge University Press, 1994, p. 63; and in *Socrates, Ironist and Moral Philosopher*. Ithaca, N.Y.: Cornell University Press, 1991, p. 15. Also Gulley emphatically denies that Socrates' concern with the doctrine of moral knowledge can be associated "with the sort of distinctions which would suggest a clear awareness of, or interest in, epistemological questions." In *The Philosophy of Socrates*. London:

textual evidence shows Socrates being interested particularly in true knowledge of morality. This intellectualist approach to virtue, some argue, is an indication that Socrates might be entertaining a side interest in epistemological questions and ontology¹⁴ within his ethics agenda. Recently, there has been a movement to focus on Socrates' contributions to epistemology and metaphysics. 16

Macmillan, 1968, pp. 12.

him, one who has an ontology does not qualify for an ontologist. According to him, one who has an ontology does not qualify for an ontologist. The latter would have to subject the contents of his inquiry to critical evaluation. But the Socrates of the early dialogues does not appear to do so: "one would qualify as an ontologist if one made ontology an object of reflective investigation. And this is what S[ocrates] never does. He never asks what sorts of things forms must be if their identity conditions can be so different from those of spatio-temporal individuals and events that the identical form can be "in" non-identical individuals and events. The search for those general properties of forms which distinguish them systematically from non-forms is never on his elenctic agenda." *Socrates, Ironist and Moral Philosopher*. Ithaca, New York: Cornell University Press, 1991, pp. 57-66. For similar views see Gulley, N. *The Philosophy of Socrates*. London: Macmillan Press, 1968, pp. 12.

or metaphysical agenda, admitted that the philosopher's questions pertaining to justification and ontology paved the way for Plato's more systematic approach to a theory of knowledge. In "Review of Gregory Vlastos' *Socrates, Ironist and Moral Philosopher*". *Philosophical Review*, vol. 101 (2), 1992, pp. 353-358. For a similar position see Penner, T. "Socrates and the Early Dialogues." In *The Cambridge Companion to Plato*, edited by Richard Kraut. Cambridge: Cambridge University Press, 1992, pp. 121-169; Brickhouse, T.C. and Smith, N.D. *Plato's Socrates*. New York: Oxfrod University Press, 1994, pp. 30-73; Santas, G.X. *Socrates Philosophy in Plato's Early Dialogues*. Boston, Mass: Routledge & Kegan Paul, 1979, p. 84.

¹⁶Woodruff credits Socrates with a proto-theory of knowledge mainly concerned with the distinction between expert and non-expert knowledge, but falling short of the fundamental worries in epistemology regarding grounds of knowledge and justification of belief. In "Plato's Early Theory of Knowledge" in *Essays on the Philosophy of Socrates* edited by Hugh Benson. New York: Oxford University Press, 1992, pp. 86-106. Allen, on the other hand, in his analysis of the *Euthyphro* recognizes that Socrates' assumptions in the quest for a definition of 'What is holiness?' reveal a metaphysical substructure for a theory of forms. In *Plato's 'Euthyphro' and the Earlier Theory of Forms*. New York:

Any attempt to provide a coherent picture of Socrates' epistemological agenda appears to converge upon one specific claim he makes about knowledge, namely, that knowledge is *dunamis*. That Socrates considers *dunamis* to be a defining characteristic of knowledge is evident from several passages in the early dialogues. For instance, in the *Euthydemus*, he asks both Euthydemus and Dionysodorus and their followers 'to demonstrate the *dunamis* of their wisdom' (274c-d); also in the *Gorgias* he asks the sophist 'what the *dunamis* of his expertise is and what it is he advertises and teaches' (447c).¹⁷

The need to address a Socratic model of *dunamis* in order to efficiently discuss Socrates' model of knowledge, if he has any at all, has been recognized by several commentators. ¹⁸ The question, however, is how "cooperative" Socrates is in our discussion

Humanities Press, 1970.

¹⁷Also see *Gorgias* 509d2-e1, *Hippias Major* 296a4-6 and *Hippias Minor* 365d6-366a4.

¹⁸See Penner, T. "Desire and Power in Socrates: The Argument of Gorgias 466a-468e That Orators and Tyrants Have No Power in the City." Apeiron, vol. 24, 1991, pp. 147-202; Ferejohn, M.T. "Socratic Virtue as the Parts of Itself." Philosophy and Phenomenological Research, vol. 44, 1984, pp. 377-388; Irwin, T. H. Plato's Moral Theory: The Early and Middle Dialogues. Oxford: Clarendon Press, 1977, p. 296; Zembaty, J.S. "Socrates' Perplexity in Plato's Hippias Major." In Essays in Ancient Greek Philosophy. Edited by J.P. Anton and A. Preus. Vol. 3. Albany, N.Y.: State University of New York Press, 1989; Weiss, R. "Ho Agathos as Ho Dunatos in the Hippias Minor." In Essays on the Philosophy of Socrates. Edited by H.H. Benson. New York, Oxford: Oxford University Press, 1992, pp. 242-262; Mulhern, J.S. "Tropos and Polytropia in Plato's Hippias Minor." In Phoenix, vol.22, 1968, pp. 283-288. A more recent attempt that discusses dunamis with respect to the Socratic model of knowledge has been proposed by Benson in his book on Socratic Wisdom: The Model of Knowledge in Plato's Early Dialogues. NewYork: Oxford University Press, 2000. Accordingly, he proposes that 'Socratic knowledge is a power or capacity (dunamis) associated with a particular object or subject matter that is necessary and sufficient for the production of an interrelated coherent system of true cognitive states involving that state. According to Socrates, lacking such a capacity, one has no knowledge; with it, one's true beliefs become knowledge." (p. 190)

of a model of *dunamis* which in turn will provide helpful insights for his model of knowledge. The answer to this question brings us to the third point I mentioned in the beginning of this discussion, namely, Socrates' eclecticism with respect to giving an account of the things of his inquiry.

In the *Republic*, Book VII, Plato's Socrates attests that a good dialectician will have to produce the *logos* (explanation) of the being of each thing he employs:

Then, do you call someone who is able to give an account of the being (ton logon tes ousias) of each thing dialectical? But insofar as he's unable to give an account of something, either to himself or to another, do you deny that he has any understanding of it?" (534b1-5)

Does the Socrates of the early dialogues abide by this principle? Namely, does he produce the *logos* of the beings of his inquiry?

His initial concern is to investigate the guidelines for a life worth living. And that he does. He gives an account of what virtue is which brings to surface the rather strange relationship between morality and knowledge, knowledge and *dunamis*. However, for both of the two new concepts, knowledge and *dunamis*, he introduces to analyze virtue, he is very laconic. Socrates never asks the "what F-ness is" question concerning knowledge¹⁹ and *dunamis* in the early dialogues.²⁰ In fact, there is hardly any evidence to support the assumption that Socrates is expressly interested in postulating a theory for both knowledge and *dunamis* which eventually succumbs to his primary goal for the search for morality.

¹⁹Plato's Socrates does this in the middle dialogue, *Theaetetus*.

²⁰Socrates' search in the early dialogues appears to be oriented towards definitional knowledge or knowledge of definitional propositions; that is, his questions focus on knowledge of what F-ness is, which he uses interchangeably with knowledge of F-ness, and not on what knowledge is. See *Hippias Major* 304d5-e1, *Euthyphro* 15d-e.

Nevertheless, in the course of his discussion of other "what F-ness is" questions, how Socrates would have answered questions regarding knowledge and *dunamis* can be pieced together.

To sum up, Socrates' preoccupation with the true moral life leads him to claim that no one knowingly errs. Any meaningful analysis of such a paradoxical claim would have to incorporate an analysis of both 'episteme' and 'dunamis'. Leaving the discussion of a possible Socratic model of knowledge to the epistemologists, I will focus for the remainder of this chapter on the various assumptions Socrates makes about dunamis. It is not the goal of this chapter to discuss exclusively "knowledge as dunamis"; rather I will treat this claim as one of the assumptions Socrates makes in regards to his implicit account of dunamis. Specifically, in the following section, I will first address the dunameis in the Socratic universe, taking particular interest in their association with the past. As I have said elsewhere, Socrates' philosophy was not born ex nihilo. His views, the philosophic language and the concepts he uses to express them are evolved manifestations of the existent culture. in order to understand his language with respect to the concept of dunamis, it makes sense, then, to revisit the relevant evidence from the works of his predecessors and draw the similarities between his version and theirs.

4.3 The Socratic Dunameis on a Par with the Presocratic Dunameis

The Socratic universe, like its Presocratic counterpart, is a dynamic one. It is comprised of a plethora of *dunameis* at work. Socrates, in the same spirit with the rich tradition he has inherited, considers *dunamis* to be one of the essential properties of the

animate and inanimate substances of the intelligible and divine realm. As we will see in the subsequent brief survey, the existence of a *dunamis* in a substance merely denotes the ability to change or cause change. The specialized sense of the term, *dunamei einai*, Aristotle uses to draw the very sense of potentiality is absent from the early dialogues.

Let us begin, then, with the relationship between *dunamis* and *ischus* (strength). As I have mentioned in the third chapter these two terms originally were distinguished in Hesiod's works and thereafter in the early philosophical writings. The relationship was clearly implied in a fragment attributed to Diogenes of Apollonia where *dunamis* is a necessary condition for *ischus*, i.e. the air has the *dunamis* to create strong (*ischuron*) winds. In Plato's *Protagoras*, this relation is brought up explicitly. When the namesake raises a parallel argument to show that Socrates uses illegitimate assumptions to prove that courage is wisdom, ²¹ he refers to the difference between *dunamis* and *ischus*. There he explains that *dunamis* and *ischus* are two different entities and that the former is a necessary condition for the latter and not vice versa. The gist of the analogy regarding *dunamis* and strength is that as daring is to courage, so is *dunamis* to strength; for all courageous are daring but not all daring are courageous. Similarly all strong are capable but not all capable are strong:

²¹Taylor in his commentary gives a detailed account of Socrates' argument and Protagoras' criticism. Taylor, C.C.W. *Plato: Protagoras*. Revised edition. Oxford: Clarendon Press, 1991, pp. 150-161.

from a good natural condition and nurture of the body (ἰσχὺν δὲ ἀπὸ φὺσ \in ως καὶ \in ὐτροφὶας τῶν σωμὰτων). And similarly in the other case daring and courage are not the same, so that it happens that the courageous are daring, but that not all the daring are courageous. For daring results both from skill and from animal boldness and madness, like capability, but courage from a good natural condition and the nurture of the soul. (*Protagoras* 350e-351a; Taylor's translation)

Starting with the divinities, Socrates attributes to them *dunameis* which in turn they can bestow upon humans. Like Hecate who has the *dunamis* to make the ones she favors successful (*Theogony* 425-420), the Muse's *dunamis*, Socrates believes, is responsible for making Ion a masterful speaker when it comes to Homer.

I do see Ion, and I am going to announce to you what I think that is. As I said earlier, that's not a subject you've mastered-speaking well of Homer; it's a divine *dunamis* that moves you, as the "Magnetic" stone moves iron rings. In the same way, the Muse makes some people inspired herself, and then through those who are inspired a chain of other enthusiasts is suspended. (*Ion* 533d1-e6)

That divinities have *dunameis* is also assumed by Plato in the middle dialogues. In *Cratylus*, for instance, Socrates admits to the existence of a *dunamis* greater than human (438c) which earlier he acknowledges as a *dunamis* more divine than its human counterpart (397c), to finally speak of the *dunameis* of Apollo (405a).

The above motif is elaborately illustrated in Protagoras' myth in *Protagoras* (320c8-322e). According to his myth (*mython*), the gods asked Epimetheus and Prometheus to distribute *dunameis* to animals and human beings. Hence, in accordance to their nature, Epimetheus gave the non-rational creatures first *dunameis* such as strength (*ischus*), speed (*tachei*), size, etc. Having used his distribution unwisely, Epimetheus run out of *dunameis* to give to humans. Prometheus comes to his aid, who, by stealing from Hephaestus and Athena their skill, gave humans the *dunamis* of practical wisdom; and later Zeus would give

them the dunamis of political expertise.

Protagoras' mythos, which, incidentally, Socrates does not appear to object to, brings to surface the aforementioned relationship between dunamis and strength (ischus), namely, that dunamis is at least a necessary condition for strength. Moreover, if my interpretation of the textual evidence so far has been correct, it appears that the same kind of relationship stands between dunamis and its other various manifestations such as size, speed, practical and political wisdom. Namely, dunamis is a necessary condition for size, speed, practical and political wisdom.

Socrates explains in the *Hippias Minor* (366b11-c4), that when a *dunamis* is conferred upon a human being, then he

does that which he wishes at the time when he wishes. I am not speaking of any special case in which he is prevented by disease or something of that sort, but I am speaking generally, as I might of you that you are *dunatos* to write my name when you like.

Socrates does not limit *dunameis* only to rational and non-rational beings. In the *Ion* (533d1-e6), for instance, he speaks of the *dunamis* of the "Magnetic" stone to move iron rings.

... a "Magnetic" stone moves iron rings. (That is what Euripides called it; most people call it "Heraclean".) This stone not only pulls those rings, if they're iron, it also puts *dunamis* in the rings, so that they in turn can do just what the stone does-pull other rings-so that there is sometimes a very long chain of iron pieces and rings hanging from one another. And the *dunamis* in all of them depends on this stone. (*Ion* 533d1-e6)

He uses this example only to show how the Muse's *dunamis* moves the inspired poet to speak well of his subject. In both cases, though, Socrates does not say how an immaterial

entity such as *dunamis*²² interacts with objects of material constitution, induces movement of any form to these objects, let alone confer an equivalent *dunamis* upon some of them. In other words, this use here suffers from the same problem the Empedoclean one does.

Socrates' apparent indifference to the above discrepancies provides more support to the original assumptions regarding his goals in the early dialogues. Namely, anything that is directly related to promoting his ethical agenda, for instance true morality, Socrates will scrutinize religiously. Any auxiliary concepts he uses to do so, he will adopt the use and meaning that have been commonly accepted or established within the literary community. Hence, a well thought out account of *dunamis* should be expected of a natural philosopher

²²As I have mentioned previously, the Socrates of the early dialogues does not say anywhere whether *dunamis* is an entity of material or immaterial constitution. The first reference ever in both the early philosophical and Platonic writings of what *dunamis* might be occurs in the *Republic* V, 477c-d, where Plato's Socrates claims that it does not have tangible qualities such as color or shape, namely it is not of material constitution. I can only assume, then, that the historical Socrates was of the same opinion.

or a metaphysician, since for both the term can be quite essential in developing their theories. In effect, middle Plato and Aristotle who are more concerned with metaphysics and ontology take a particular interest in *dunamis*. The former specifically addresses the role of *dunamis* in his inquiry, when in the *Sophist* (247d-e) he "takes it as a definition that *those which are* amount to nothing other than capacity (*dunamis*)."; the latter will develop a theory in order to compensate for the weaknesses of his predecessors accounts.

To conclude this section, I mention in passing that Socrates' use of *dunamis* in relation to intelligible objects was not foreign to the ancient Greek at the time of Socrates. This idea of making *dunamis* one of the essential properties of intelligible objects could already be found in the works of the early thinkers; for instance, the Pythagoreans were already ascribing *dunameis* to their primary substance, Number.

In summary, in this section I intended to show the interrelation of the Socratic dunameis with their counterparts in the existing literature, especially the works of the early thinkers. Like his predecessors, Socrates attributed dunameis equally to animate rational and non-rational entities, inanimate objects, divinities and intelligible objects. In all of them dunamis is one of the essential properties in that it is because of the existence of dunamis that an object is capable of exhibiting a specific trait and it is due to dunamis that an object can bring about change or suffer change. Having given the primary features of the Socratic dunameis, now I will turn to the final section of this chapter to discuss exclusively some of the peculiarities of the Socratic dunameis.

4.4 Socrates' Dynamic Peculiarities-Dunamis Evolved

When it comes to Socrates' understanding and applications of *dunamis*, there appears to be no golden rule one could use to decide upon a uniform pattern his *dunameis* may follow. As I have already admitted from the onset of this project, it could be misleading to even expect from him to expressly discuss a model for what I have called an "auxiliary" concept. What I purport to do in this section, then, is with the help of the text to address Socrates' use of the term and how his take contributes to the evolution of the term.

Since Socrates assigns *dunameis* to a variety of things and associates them with a variety of activities, it seems only appropriate that a meaningful discussion of them would have to include the objects and the activities to which they refer.²³ There are two pivotal passages in the early dialogues where Socrates indicates the way he intends to use the concept of *dunamis*. In the *Charmides*, Socrates claims that

the very thing which has its own *dunamis* applied to itself will have to have that nature towards which the *dunamis* was directed. (168d1-3)

That is to say that a *dunamis* is associated with a particular object of a particular nature. The examples he gives are of the *dunamis* of hearing and sound, vision and color.

The second important passage is in the *Hippias Minor* where he proclaims that for a particular *dunamis* to actualize there have to be the right circumstances:

every man has *dunamis* who does that which he wishes at the time when he wishes. I am not speaking of any special case in which he is prevented by disease or something of that sort, but I am speaking generally, as I might of you that you are *dunatos* to write your name when you like. (366b11-c4)

²³I owe most of the remarks discussed here to the helpful comments Benson makes on Socrates' dynamic theory. See Benson, H.H. *Socratic Wisdom: The Model of Knowledge in Plato's Early Dialogues*. Oxford, New York: Oxford University Press, 2000, 197-204.

Keeping these two conditions in mind, namely, that a particular *dunamis* is associated with an object of a particular nature (a) actualized under the right circumstances (b), let us see what Socrates has his *dunameis* do.

The basic assumption that Socrates inherited and adopted from his predecessors is that a particular *dunamis* is associated with a particular activity. ²⁴ But since it is an intangible entity, to identify it we would have to identify the activity it is associated with; to use Plato's words, we need to see "what it is set over" first. Most of the times, Socrates follows this rule. Some times, though, he seems to be of a different opinion. Take for instance, someone who is ignorant of calculations. According to Socrates, the ignorant may give the correct answers, although he lacks the specific *dunamis* associated with giving the correct answers in calculations:

Or would one who is ignorant of calculations have more power than you to lie if he wished to? Don't you think the ignorant person would often involuntarily tell the truth when he wished to say falsehoods, if it so happened, because he didn't know. (Hippias Minor 367a1-6)

Whereas the case of the ignorant above suggests that a specific activity is manifested not because of the existence of a corresponding *dunamis*, but of some other factor, accident or pure luck, another passage in the *Laches* indicates that a particular activity may be associated with some other *dunamis* than the one expected. Specifically, the Spartan hoplites fleeing the battlefield at Plataea could be originally attributed to the *dunamis* of cowardice; but when they broke the Persians ranks, their activity under these new circumstances is

²⁴The list of the various activities Socrates associates with the various *dunameis* includes some rather strange kinds such as the ones of the greater that is associated with the lesser, the double associated with the half, where it is not clear how these can be classified as activities. (*Charmides* 168b5-8)

associated with the dunamis of courage:25

Except perhaps the Spartan hoplites, Laches. Because they say that at Plataea the Spartans, when they were up against the soldiers carrying wicker shields, were not willing to stand their ground and fight against them but ran away. Then when the ranks of the Persians were broken, they turned and fought, just like cavalrymen, and so won that particular battle.(191b1-5)

If identifying the right activity, then, is inconclusive with respect to identifying the corresponding *dunamis*, perhaps taking Plato's suggestion on "what it does", to what kind of things *dunamis* belongs, might be more useful. Socrates seems to favor and follow this pattern in several dialogues. For instance, in *Euthydemus*, Socrates asks the two brothers to 'demonstrate the *dunamis* of their wisdom' (274c6-d3); whereas, in *Laches* he is interested in discovering the *dunamis* of courage (192b6-7)²⁶. Whereas, in the *Gorgias*, he keeps on pushing Gorgias to clarify his answer with regards to the *dunamis* of his expertise.²⁷ Hence when he claims that his expertise is rhetoric, Socrates asks him what this expertise is about, considering that the *dunamis* of weaving is about making clothes, that of music about making songs:

Come then. You claim to be knowledgeable in the craft of oratory and to be able to make someone else an orator, too. With which of the things there are is oratory concerned? Weaving, for example, is concerned with the production of clothes, isn't it? –Yes. –And so, too, music is concerned with the composition of tunes. –Yes. (449c9-d6)

²⁵Similar examples where Socrates allows a particular activity to be related to a different *dunamis* are found in the *Republic* I, 346b3-6.

²⁶See also the *Protagoras* where Socrates is preoccupied with the question as to whether Protagoras' political wisdom is one or two *dunameis*. Also see *Hippias Minor* 365d6-366a4, *Gorgias* 509d2-e1, *Hippias Major*296a4-6.

²⁷As I have mentioned elsewhere, Socrates uses the words "wisdom", "knowledge", "expertise", and "craft" interchangeably. And for all of those, it is assumed they are associated with *dunameis*.

Gorgias' answer that the *dunamis* of his expertise is about making speeches will be scrutinized in the usual Socratic fashion and justifiably so, since it is too broad; there are many *dunameis* whose end goal is about making speeches. Take medicine or physical training, for instance. They are both concerned with speeches, one about diseases and the other about good and bad physical condition respectively. Gorgias will again answer a series of Socratic questions until he gives an answer regarding the exact nature of the specific *dunamis* he is reputed to have.²⁸ By doing so, Socrates appears to imply, one would be able to distinguish one *dunamis* from another.

So far the textual evidence shows that Socrates favors two criteria with respect to his dunameis. First, as his predecessors implied, he understood that since a particular dunamis is related to a particular manifestation, being able to identify that particular manifestation would lead to the identification of the particular dunamis. This does not work in cases where a particular manifestation or activity is not the product of an expected dunamis. The text suggests there might be another avenue to follow in order to understand the Socratic dunameis, namely, to find out what kind of things a dunamis belongs to. For as Socrates puts it

to each profession (techne) a god has granted the ability to know (our $\tau \in \tilde{i} \nu \alpha \iota \gamma \iota \gamma \nu \tilde{\omega} \sigma \kappa \in \iota \nu$)²⁹a certain function (ergon). I mean, the things navigation teaches us -we won't learn them from medicine as well. (Ion 537c7-9)

²⁸This route appears to find support in a pivotal passage from the *Charmides* I mentioned in the beginning of this section.

²⁹Take special notice of the Greek in this sentence. As I have mentioned in the second chapter, besides the verb *dunamai* and its derivatives, there are some fixed phrases such as the one in the text above *oion te* followed by an infinitive that denote ability as well.

And Socrates continues to say that what determines the *dunamis* of one *techne* to be different from another is it is probably due to some kind of a relationship it stands in with respect to the objects it refers.

When I find that the knowledge [involved in one case] deals with different subjects from the knowledge [in another case] then I claim that one is a different profession from the other. (*Ion* 537d4-e1)

Hence, two distinct *dunameis* such as medicine and architecture, can have two distinct objects, so that difference in object entails difference in *dunamis*.³⁰

This seems to work until in the *Gorgias* Socrates indicates that two different kinds of *dunameis* might be instantiated in the same activity. Take for instance, the *dunameis* of medicine and gymnastics. Both are two different *dunameis* but they are both associated with the same kind of activity, i.e. the good of the body; equally, the *dunameis* of legislation and justice³¹ are associated with the good of the soul:

Come then, and I'll show you more clearly what I'm saying, if I can. I'm saying that of this pair of subjects there are two crafts. The one for the soul I call politics; the one for the body, though it is one, I can't give you a name for offhand, but while the care of the body is a single craft, I'm saying it has two parts: gymnastics and medicine. And in politics, the counterpart of gymnastics is legislation, and the part that corresponds to medicine is justice. Each member of these pairs has features in common with the other, medicine with gymnastics and justice with legislation, because they're concerned with the same thing. They do, however differ in some way from each other. (Gorgias 464b3-c4).

So, contrary to what he says in the *Ion*, here the two different *dunameis* stand in some kind of special relationship to the same object. Can Socrates' apparent inconsistency be blamed

³⁰For more on this see Benson, H.H. "Socratic Dynamic Theory: A Sketch". In *Apeiron*, v. 30, 1997, pp. 89-91.

³¹That these two are considered *dunameis* is also brought up in story of Protagoras.

on Plato's carelessness? Dialogue as a medium for exposing and communicating ideas is definitely less rigorous than a typical treatise. Or is Socrates' indiscretion an instance of his zealous nature determined to find out whether Gorgias' expertise, rhetoric, is a genuine one? To rule out any of the above possibilities would require a more extensive account of the Socratic *dunameis* than the one I intended to provide here.

One final observation I would like to make with regards to Socrates' contribution to the philosophical evolution of the concept of *dunamis*. It is true, the above criteria Socrates implicitly or explicitly stated in the early dialogues appear to apply primarily to substances with intentional states. It is also true, that he seems to believe that "non-rational creatures" have *dunameis*, although it is not clear how his views above could also apply to them. As for the inanimate objects, such as the Magnesian stone, Socrates simply accepts the observations his predecessors have made without being able to explain, as I said earlier, how an immaterial entity can interact with an object of material constitution.

Notwithstanding Socrates' views on the concept of *dunamis* are mainly focused on how beings with intentional states instantiate their *dunameis*, it is still a far cry from the way the term was used initially in the different branches of ancient literature, by the mythologists and then the early thinkers. Socrates took the assumptions of the tradition one step further. Granted that the divine, whichever way you define it, bestows *dunameis* to animate and inanimate objects, and granted that these *dunameis* are for the most part indicative of a capacity to change or cause change, Socrates' investigation of the virtuous life implicitly or explicitly brings up the intricate relationships between a *dunamis* and its manifestation. Has his account settled the issues once and for all? By no means. Neither has he nor have I

provided an exhaustive account of the Socratic *dunameis*. What I have done is to add some insights to Socrates' statements about *dunamis* with the use of the tradition he was a part.

4.5 Conclusion

What I intended to do in this chapter was to discuss the features of the Socratic dunameis. In the course of the examination I considered the role of the tradition in Socrates's views about dunamis, how much the script changed under him and what kind of elements he adds, if any to the already existing accounts. Although the role of dunamis in his ethics agenda is secondary, it is still quite important to investigate it, since he uses dunamis in relation to what he says about wisdom, knowledge, expertise. A brief overview of his agenda in the early dialogues shows that Socrates dedicates most of his attention to investigate the principles that govern a life worth living. Hence, his implicit or explicit statements with respect to dunamis are only meant to aid his analysis of virtue.

My discussion of the several features of the Socratic *dunameis* has yielded the following points. 1. Socrates, in agreement with the tradition, assigns *dunameis* to animate, inanimate substances, the divine realm and to the intelligible world. 2. The implication is that his *dunameis* like their counterparts in the views of his predecessors are immaterial entities that denote the capacity to change or cause change. 3. Like his predecessors, he fails to explain how an immaterial entity can interact with a material entity and cause the corresponding changes as is the case of the Magnesian stone.

His focus specifically on the human *dunameis* has yielded several observations: a. a Socratic *dunamis* is related to a specific activity of a specific substance with a specific

nature; **b.** a specific *dunamis* is instantiated under specific circumstances; **c.** two Socratic *dunameis* can have two different kinds of objects only to be differentiated with respect to some kind of a relation each one has to the specific object.

CHAPTER 5

The Socratic Dunameis May Not Be All Greek to Us

5.1 Conclusion

This project was conceived, as I have stated in the preface, during a discussion regarding the philosophical importance of the concept of *dunamis* in Socrates' claims about knowledge and morality in the early Platonic dialogues. The term commonly translated as "ability", "capacity", "potentiality", and "power" was used by Socrates to refer to one of the essential properties of inanimate and of rational and non-rational animate substances, of intelligible entities and of abstract ideas. Regardless of how often Socrates uses the term, he does not discuss it exclusively. Partly this makes sense, since his primary concern is the search for true knowledge of morality. The concepts that are quite essential to his search, such as virtue, Socrates religiously investigates. For auxiliary concepts, such as *dunamis*, he adopts the assumptions he has inherited from the existing literary culture. On rare occasions, when Socrates wants to clarify an argument he does not hesitate to give a definition of what a substance with a *dunamis* can do, as is the case in the *Hippias Minor*. Most of the times, though, when he uses the term without any further explanation, he appears to know what it means.

Hence, to efficiently discuss the Socratic *dunameis* and their role in Socrates' search for true knowledge of morality, I divided the project into four interrelated chapters. In the first chapter, I presented the protagonists and the cultural environment that gave rise to the philosophical enterprise. The goal was to provide some insight to the reader into how the philosophies of Plato, Aristotle and specifically Socrates came about as well as into their

valuable interdependence with the past. It is only true that the philosophic thought of these thinkers did not come *ex nihilo*. Rather, it has been the product of their individual processing of the cultural and political circumstances of the environment that fostered their views. My inquiry has addressed and shown the following points: **a.** Ancient Greek philosophy is the epitome of the several adaptations of foreign and native elements to the Greek culture. **b.** The early philosophers challenged the tenets of the existing mythopoetic tradition and replaced it with a new argumentative and self-reflective approach. **c.** Dramatic changes in economy, political affairs, art and literature influenced the philosophic reasoning.

All these three elements present in Athens, Socrates' birth city, play a critical role in shaping the philosopher's views and worries. His zealous dedication for the search of a life worth living and his unorthodox way of pursuing it, has made all more important to look closely into his philosophic existence and the controversy that surrounds it. The main question I addressed regarding the issue was whether Socrates, the philosopher of the early Platonic dialogues, is the medium chosen by a 'Socratic genre' to promote the advantages of the philosophic inquiry or the historical figure. My brief consideration of the arguments presented by both sides of the controversy were not meant to resolve the issue. In fact, for what is worth, there might not be a satisfactory solution. Because of that, I decided that for what I intended to do in the remainder of the project, I only needed to side with one part of the literature acknowledging at the same time the shortcomings. Hence, I took the views of Socrates in the early Platonic dialogues to be the ones of the historical figure as understood by Plato.

As the title of this project states, the Socratic dunameis are a tapestry of many threads

and to be able to efficiently discuss them, first I should look into the etymological roots and derivatives of the term. As a spurious entity, dunamis can easily be considered all Greek to us. Hence, such an investigation was useful, if not mandatory. In the second chapter, then, I briefly referred to the various dunameis at work in the ancient Greek universe as presented in the various branches of the ancient Greek literature. For one thing, it put the discussion on the etymology of the term and its derivatives into a useful context. Further, from this brief exposition, the reader had a chance to see how important dunamis is even in works that are not exactly philosophical. The ancient Greeks' observations of change in nature required that the thing that undergoes change or initiates the change have a specific property, namely, dunamis. Having gone through the various derivatives within the textual evidence, we came across two philosophically important derivatives that come from the original verb, dunamai: a. dunamis that denotes the capacity to change or cause change and b. dunamei (dunamis in the dative) followed by an infinitive that denotes a thing's potentiality to be or become something. The latter has become quite essential in Aristotle's metaphysical agenda. He is the first to observe in his Metaphysics Books V and IX that the two are focally related, namely, potentiality is focally related to capacity, so that if a some thing is potentially X, it also has the capacity to be or become X.

Having settled what I consider the historical and technical but still valuable parts of this project, in the third chapter I moved to the clearly philosophical part. As I have previously mentioned, Socrates' philosophy is the product of his cultural environment. Given that *dunamis* is a spurious entity-Plato is the first one to clearly state that it is an immaterial entity-and given that Socrates is rather indifferent with respect to an explanation of what he

thinks a *dunamis* is, it made all more important to address the philosophic literature before and during his time. The significance of this approach was threefold: **a**. it showed how *dunamis* evolved philosophically starting from the works of the early thinkers; **b**. it provided a helpful insight into the background of the Socratic assumptions and uses of the term; **c**. it revealed which features of the Presocratic *dunameis* Aristotle's account has in common and which ones prompted him to a detailed response with a formative model of *dunamis*.

My investigation in this chapter focused for the most part on the dynamic conception of the world in the writings of Homer, Hesiod and the early thinkers. These individuals, I argued, did not ask "What is a *dunamis*?", nor did they address a model of *dunamis*. In Homer and Hesiod, whom I called the forerunners of philosophy, the *dunameis* are assigned only to humans and divinities. The term is used only to imply the ability to cause or suffer change. In the Homeric text *dunamis* is solely related to physical strength, whereas in Hesiod's works a new term is introduced to denote physical strength (*ischus*). The relationship between the two might be, to use the Aristotelian terminology, the first actuality of a *dunamis*.

The inquiry into the writings of the early natural thinkers revealed a more philosophically interesting but still challenging picture of *dunamis* due to the fragmentary nature of the evidence. Specifically, Thales' cosmological system clearly associates *dunamis* with *kinesis* (mobility), Aristotle's first use of the term. The Pythagorean Philolaos assigns *dunameis* to an abstract term, the Decad (Ten-ness) and discusses its essence in terms of its function (*ergon*) and *dunamis*. Empedocles considers *dunamis* to be the facilitator of fundamental changes is his primordial *rizomata* (roots) but fails to explain how an

immaterial substance can mingle with elements of material constitution. On the other hand, the Atomist Democritus' dunameis are responsible for the different arrangements of taste but his dunameis cannot account for two different and actually opposing actions. Finally, Diogenes of Apollonia's take on what a dunamis can do in his monistic world system provides new information in the relationship between dunamis and ischus (strength). Specifically, air is a dunastes because it has dunameis and as such it can create ischuros (strong) winds. Hence, possessing a dunamis is a necessary and sufficient condition for being a dunastes; whereas, dunamis is a necessary condition for being ischuros and not vice versa.

Several of the points raised in this chapter were revisited in the last chapter of this project. The goal was to discuss Socrates' understanding of the concept of *dunamis* and its role in his search for moral truth. A brief exposition showed that *dunamis* is secondary to his investigation of the principles that govern an ethical life. Since his primary concern is to account for the guidelines for morally good life, investigation on secondary concepts, though instrumental to drawing the picture of morality, would be either limited or redundant. Hence, in the case of *dunamis*, I argued, Socrates relies for the most part on what the tradition before him has established without addressing the alleged failures and apparent inconsistencies of his predecessors' assumptions. Besides, what he is mostly interested is human *dunameis* and their corresponding manifestations. Hence, most of the implicit or explicit claims Socrates makes regarding *dunamis* are associated with intentional states; for the rest he relies on the tradition. An overview of the dynamic elements in the Socratic universe borrowed from the past revealed that like his predecessors: a. Socrates ascribes *dunameis* to animate and inanimate substances, to intelligible entities and abstract ideas; b. it is implicit in his

statements that his *dunameis* are immaterial entities that merely signify the capacity to change or cause change; **c.** he fails to explain the nature of the interaction between *dunamis*, an immaterial entity, and a material animate or inanimate substance.

His focus mostly on the human *dunameis* shed some new light on how they can related with their objects. Specifically, 1. A *dunamis* is related to a particular activity of a specific substance with a specific nature; 2. it is manifested under specific circumstances; 3. two *dunameis* can be related to two distinct objects only to be differentiated by some kind of relation they each have to the specific object, so that difference in the object is a necessary and sufficient condition for difference in the *dunamis*.

What are we then to conclude from all this? Are the Socratic *dunameis* still all Greek to us? A spontaneous response would be 'yes', since Socrates and his company had to deal with such an elusive entity. But after careful consideration we see that all these thinkers did not purport to answer questions regarding the nature of the entity. Clearly, they were not interested in analyzing the exact nature of the interaction of an immaterial substance with a material one. It was clear in their claims that they were only interested in its effects and to that extent, then, if my interpretation of the evidence is correct, the ancient Greek *dunameis*, for the most part, may not be all Greek to us.

Upon concluding this project, the final question I would like to answer is in what way my interpretation of the evidence helps the Socratic literature. Evidently, a comprehensive account of a Socratic model of *dunamis* is an enormous task. My goal with this project was to provide the literature with some helpful insights on the assumptions of the Socratic *dunameis*. Socrates is neither a natural philosopher, nor a metaphysician; he is primarily a

moral philosopher. *Dunamis* incidentally comes into the picture to help him promote his ethical agenda. Whatever he implicitly or explicitly claims about it will rely on assumptions already present in the culture he lives in. Hence, any serious attempt of uncovering a model of Socratic *dunamis* would have to discuss the uses and assumptions available to him before and during his time. With the help from his past we get a glimpse of the elements he adopts and the new ones he introduces; we get a better understanding of which parts of his dynamic account Socrates is open to critical evaluation and which ones he is not given his philosophic agenda.

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