

“Man is the measure of cosmos”
Democritus and Protagoras:
Values and Beliefs on Naturalism

By

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Table of contents

ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
Introduction	1
1. Democritus' philosophy in Diodorus Siculus	4
1.1. Democritus' cosmogony	6
1.2. The primary state of human beings	8
1.3. Living the bestial life	10
1.4. Fear.....	10
1.5. Language	11
1.6. Experience.....	12
1.7. Anchinoia and Logos	12
1.8. Necessity and arts.....	14
1.9. Macrocosm and Microcosm in Diodorus Siculus	14
2. Justice and Cosmogony in the <i>Protagoras</i> vs the era of Zeus in the <i>Politicus</i>	17
2.1. The myth of Prometheus in the Protagoras	18
2.2. Beresford's defence of naturalism in the Protagoras	19
2.3. Protagoras' agnosticism and the symbolism of gods in the myth	20
2.4. Is morality <i>nomoi</i> or <i>physei</i> ?	23
2.5. Morality: the bond of Nature and Nurture.	27
2.6. Providence of Nature or Divine providence in the myth?.....	28
2.7. The myth of Cronus in the Statesman	33
3. Considerations on naturalistic ethics: individual vs. social virtues	39
3.1. Democritus morality: The power of individual.....	39
3.2. Protagoras' morality as social virtue.....	46
4. Conclusion	51
References	56

To my Father.

ABSTRACT

In my thesis I explore the naturalistic views by Democritus and Protagoras regarding the origins of living beings and morality. My main claim is that although both of them share crucial ideas of naturalism and humanism, they differ significantly in their conception of morality. Democritus' thought is based on his theory of physics and emphasizes the power of the individual, while Protagoras stresses the importance of social emotions and political interaction. Drawing evidence from the myth of Prometheus in Plato's *Protagoras*, the account of prehistory in Diodorus Siculus and the myth in the *Statesman*, I explore the coherent link of humanism in Democritus and Protagoras and their antithesis with Plato's philosophy. The conclusions that I reach is that Democritus' conception of humanism leaves room for absolute individual autonomy and an ideal state to be unnecessary to have higher authority and law, while Protagoras' theorizing of human nature praises the universal character of democracy.

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Introduction

In this thesis, I investigate the early arguments of naturalism presented by Democritus and Protagoras within the framework of a common attitude to human life. The general idea behind the inquiry of Democritus' and Protagoras' views, is to defend that ancient naturalism does not imply amorality, as Plato claimed it did, but rather that it is compatible with an inclusive conception of morality connected to humanism. My main intention is to argue that although Democritus and Protagoras support morality in naturalistic terms, in opposition to Plato's and Socrates' ethical and political views, their accounts for individual and social morality are distinctive.

Of particular importance to my project will be the story of Prometheus that Plato in the *Protagoras* attributes to Protagoras, its connection to the teachings of Democritus and the account of prehistory in Diodorus Siculus. I also make use of the argument in the myth of Plato's *Statesman*, to shed light to Plato's intentions against the humanism. I intend to examine a) the ways in which Democritus and Protagoras, who were able to resist Socratic/Platonic creationism could still present compelling arguments explaining cosmogony, the differentiation of the species and the birth of society and b) the nature of the ethical and political implications of these views.

Here is how I will proceed: in the first chapter I argue that the account of prehistory found in Diodorus Siculus is based on Democritus' original views regarding the cosmos, the living beings and the first society. More precisely, I claim that the description of the cosmogony and the human nature in the text is connected with the notion of microcosm

and macrocosm in Democritus' fragments. Therefore, I analyze the key terms in Diodorus Siculus and bring evidence from the related passages regarding physics and ethics, reinforcing the suggestion that Democritus' works are linked within the framework of naturalism. This assumption will open the path to the second chapter of my thesis.

In the second chapter I argue in favour of the connection between Protagoras and Democritus. I first present Prometheus' myth in the *Protagoras* and then combine it with Diodorus Siculus' account of prehistory. My argument is based on Protagoras' agnosticism and the allegory of the divine presence in the myth. According to scholars the myth is interpreted either in teleological or in mechanistic terms. My main intention is to chart all the possible interpretations of the myth and finally argue against the teleological interpretation and in favour of mechanism. For my argument, I employ the myth of Cronus in Plato's *Statesman* to claim that gods' presence in the *Protagoras* cannot be interpreted literally, but rather metaphorically. In this way historical Protagoras transmits the views of a naturalistic tradition shared by Democritus.

Finally, in the last chapter I argue that though the two intellectuals share common ground in naturalism, they differ significantly in their conception of morality. I first present Democritus' ethical views combined to his physics and stress the importance of the body-soul interaction in his theorizing of the ideal human nature. This combination is crucial because it allows for the improvement of the individual. Then, I connect his conception about human nature and the first society in Diodorus Siculus with his ethical statements to support that *logos* (reason) and *anchinoia* (sagacity of soul) are the main features to establish an ordered society. Of particular importance to the ordered life is the notion of *aidos* (shame) that functions as the practical reason in Kant. Democritus implies that it is possible for an individual to be autonomous and in the same way it is possible for

an ideal state, consisting of autonomous citizens, to be unnecessary to have higher authority and laws. But this scenario is extremely demanding for human nature and almost impossible to establish justice in the individual and correspondingly in the society.

The alternative option, conveyed by Protagoras, presupposes that *aidos* is not enough for morality and it is necessary for human beings to have as an innate feature the sense of fairness. Only through the emotions of *aidos* and *dike* and the opportunity to decide always for the best, people can have progress. Protagoras' opportunity to choose for the best is relevant to his relativism and his *homo mensura* thesis and it is consistent with the notion of advantageous life, which can fully flourish in a democratic state.

1. Democritus' philosophy in Diodorus Siculus

In the first book of Diodorus Siculus' history we find a description of the origins of living beings and the first human society. This description is usually attributed to Democritus.¹ Notwithstanding the criticisms of those scholars who believe that Diodorus' source does not present Democritus' views, it appears that a closer examination of Democritus' doctrines reflects the ideas articulated in Diodorus' sections (1.7-1.8).²

Based on this assumption, scholars have defended different accounts for the interpretation of the story in Diodorus Siculus and combined it with the myth of Prometheus in Plato's *Protagoras*. Adam Beresford has advocated that Democritus and Protagoras share the same naturalistic account concerning the origins of living beings and the creation of the first society; Beresford's interpretation depends on a Darwinian exegesis of human progress (Beresford, 2013:1).³

On the other hand, Gregory Vlastos much earlier in his article, *On the pre-history*

¹ The evidence for Democritus as source of Diodorus Siculus is not certain. There is quite a debate about the origins of these sections. Reinhardt pointed out that these sections are not Epicurean but go back to Hecateus of Abdera (1912, pp. 492ff.). He concluded that they contain the doctrine of Democritus. Dahlmann (1928, pp. 23 ff.) argues against this attribution and claims that it must then be pre-Atomistic. Diels attributes the famous account by Diodorus Siculus to Democritus (DK 68B5). Naddaj, 156

² Gregory Vlastos assumed that these fragments (1.7-1.8) have their origins to Democritus' doctrines and that "are filled out ideas for which some independent warrant exists in surviving Democritean fragments" (Vlastos, 1946: 59).

³ Another option is presented by Catherine Osborne in her book *Dumb beasts and dead philosophers*. Osborne claims that Protagoras' views are consistent with a model of natural evolution but she does not refer to Diodorus' sections as a parallel. Osborne's approach connects Protagoras' views in the eponymous dialogue with Democritus ethical fragments in general. In addition, she stresses that Democritus and Protagoras were interested in the role of human beings in nature and that they agree with certain

in *Diodorus*, followed another path, in which he distinguishes between the account in Diodorus, where naturalistic doctrines are explicitly presented and the account in Plato's *Protagoras*, where these doctrines might be inferred, but are not explicitly stated. Vlastos argues that the reader of the description in *Protagoras* can understand it in either teleological or mechanistic terms, but the account itself is silent about the mode of explanation (Vlastos, 1946:57).

Starting from the last suggestion, my aim is first to examine the connection of Democritus' conception regarding cosmogony and human society with his views as presented in other fragments. This approach will a) be the basis for clarifying at the last chapter of my thesis the difference between Democritus and Protagoras, and b) support the case that there is a coherent link between the thoughts presented in different fragments –including the description of the human, primitive stage in Diodorus– although it might be not the case that his atomistic theory imposes individualism on his idea of social life.⁴ However, it is noteworthy that his naturalistic conception of the universe, human nature and society implies the praise of human reason (*logos*), the attempt to comprehend the world in terms of human experience and natural necessity, namely the switch from religion to science, from divinity to humanism.

Methodologically speaking, my task in this chapter is a) to establish an analysis of the key ideas found in 1.7 and 1.8 of the account of prehistory in Diodorus Siculus and their correspondence with Democritus' ethics and physics and b) an elaboration of this

Presocratics, namely with Anaxagoras (DK B21) regarding the inferiority of man compared to animals (2007, p.34).

⁴Furley, 1987, p. 167.

analysis in order to understand Democritus' conception of human nature and the process that leads to social life. Last, but not least, my concern will be to argue that Democritus' humanism embraces indispensably the demand of a genetic theory, an early account of the theory of evolution.⁵

1.1. Democritus' cosmogony

The origin of the world described in 1.7 is explained by natural causes, without the intervention of any other agency (the Demiurge of Plato, or the Mind in Anaxagoras), as merely the result of a mechanistic procedure.⁶ The first phase describes the unity of the heaven and the earth and their mixed synthesis. During the second phase, the bodies are disjointed and get into an ordered state with the help of air, heat and continuous motion. The fiery part of the cosmos ran together towards the highest regions (this phenomenon notes the appearance of gravity and lightness), while the sun and the stars, because of their fiery compound, were intermixed into a whirl. Then, the separation into land and sea takes place and on the surface of the land, wet pustules appeared with delicate membranes, as the original bearers of life. The last phase explains the nourishment of the "embryos" and the *spontaneous* generation of living beings from earth. Each one of these

⁵ The idea of a theory of evolution is first indicated in Empedocles' fragments (DK 62) but also in Democritus' and Epicurus' thought. However, this early evolutionary theory is quite different from the Darwinian theory. The ancient intellectuals a) did not have the knowledge of genes b) they referred only to the variety of species and to the adaptive change of the character of a certain kind, c) the stress of the ancient theory is on the survival of the fittest species and d) there is no reference that the fittest organisms transmitted their features to their inheritors. Furley, 1987, 98.

⁶ It has been suggested that the sheer infinite size of the atomist universe and thus the number of possible combinations and arrangements that would occur by chance alone are important in the development of an account that can show how human institutions arise without assuming teleological or theological origins (Cole 1967). <http://plato.stanford.edu/entries/democritus/#8>.

living beings went to live to the appropriate place “according to the amount of each element within them” (birds to the sky, fishes to the sea etc.).

The main idea of cosmogony in this fragment seems to reflect significantly Anaximander’s postulation about the origins of cosmos.⁷ However, a closer examination of the passage makes clear the reference to atomistic vocabulary: *and it is for this reason that the sun and the multitude of other stars became involved in the universal whirl* (τῇ περιστροφῇ δὴνῃ 1.7, 13).⁸ According to the atomistic theory, the atoms of the bodies compose the world by forming among themselves a circular pattern of motion (ἐκλούμενον δὲν αὐτὴ συνεχῶς καὶ συστρεφόμενον 1.7.10).⁹ In addition, the reference to membranes in the text resembles the cosmogony given by Diogenes Laertius, attributed to Leucippus: “A sort of membrane comes apart from this, containing in itself bodies of all kinds” (DK 67A). It is quite remarkable that the description of cosmos as an embryo by the atomists has many similarities with the Hippocratic little treatise on embryology.¹⁰ This resemblance might be an indication of Democritus’ knowledge of ancient medicine and his interaction with his contemporary Hippocrates.¹¹

⁷John Morrison argues that Diodorus Siculus refers to a pre-atomistic source and he suggests that the description of cosmos in 1.7 reflects Anaximander’s theory: “The Diodorian zoogony recalls the famous theory of Anaximander (Aetius, v. 19. 4: cf. Censorinus, 4. 7) that “the first living creatures were engendered in the wet element enclosed in spiny membrane”; Morrison, 1941, p.17.

⁸ Vlastos stresses that this is the crucial passage, which enhances that the reference to cosmogony is atomistic: “The fiery part (sc. of the air) gathered into the highest regions, for anything of this nature, being light, moves upward; and this is the cause of the sun and the rest of the stars being caught up into the universal whirl”; *ibid*, 58.

⁹Furley, 1987, 142.

¹⁰ Furley, traces the analogy between the description of the birth of cosmos, attributed to Leucippus, and the embryological text in Hippocrates. P. 144.

¹¹ Jouanna refers to Democritus and Hippocrates as contemporaries and friends. He also stresses that the education of a physician included definitely the studies in rhetoric and cosmology; there is close connection between philosophy and medicine: 2001, p.18. Evidence for this connection we find also in the Hippocratic text entitled “Fleshes”. There, the author points out that in order to compose his medical treatise he must first refers to the origins of universe and human beings (Loeb, 1-4). Furley also states that during the fifth

Therefore, there is an analogy between mechanism and biology, which reveals also the analogy between “macrocosm” and “microcosm”.¹² Democritus was the first one that had the idea that man is a little cosmos, meaning that a) man obeys the same natural rules as the bodies those of the universe b) he is formed from the same constituents as the rest of the universe,¹³ c) he is conceived as the same example of the pattern and d) he has the same development of the pattern’s structure.

Apparently, this analogy fits also to the relevant passages in Diodorus: we have a mechanistic account of the universe mobilising also biological processes¹⁴ and a description of human progress in terms of a mechanistic approach. The perpetual change of the universe becomes on earth the *necessity* for human progress. After the ‘birth’ of cosmos the primitive phase of living beings follows.

1.2. The primary state of human beings

As it is described, the first human beings came out from the earth like worms. In

century there was no “sharp distinction between a biological and mechanical model in the history of cosmology” (ibid, p. 143).

¹² Democritus considered human being as the “little cosmos” or “microcosm”. Perhaps he wants to stress that either men take part to the ordered state of the cosmos, or that atoms and void compose the universe and the living organisms. Furley, 1987, p.157. Aristotle criticizes the physicists, included Democritus, for perceiving the human nature in similar way as the universe. *Parts of Animals* (1.640b4–12).

¹³Frédéric Le Blay, 2012, p.251.

¹⁴“...while the wet was being impregnated with life by reason of warmth in the manner described, by night the living things forthwith received their nourishment from the mist that fell from the enveloping air, and by day were made solid by the intense heat; and finally, when the embryos had attained their full development and the membranes had been thoroughly heated and broken open, there was produced every form of animal life. Of these, such as had partaken of the most warmth set off to the higher regions, having become winged, and such as retained an earthy consistency came to be numbered in the class of creeping things and of the other land animals, while those whose composition partook the most of the wet element gathered into the region congenial to them, receiving the name of water animals. And since the earth constantly grew more solid through the action of the sun’s fire and of the winds, it was finally no longer able to generate any of the larger animals, but each kind of living creatures was now begotten by breeding with one another”

the beginning they started living in a bestial,¹⁵ unordered state of life, exposed to several dangers. The feeling of danger triggered the emotion of fear and because of expediency (ὑπὸ τοῦ συμφέροντος διδασκομένους), men started gathering together and sought mutual protection. Through their contact they developed speech, a way to communicate with sounds and gestures and then they made *conventions* for every object among themselves (πρὸς ἑλλήλους τιθέντας σύμβολα), in order to create their first language. Because of the fact that they assembled together in an unordered way (σποράδην), each one of them belonged to different groups and consented to different language (having also different conventions). In the meanwhile, they were suffering from extinction, because of the inopportune survival conditions (lack of clothes, dwelling, and food, hard climatological conditions).

However, Democritus stresses that *experience* becomes the greatest teacher (ὑπὸ τῆς πείρας διδασκόμενοι) and helped people to secure themselves. Gradually, they were discovering fire and “other things” and they established their first communities (καὶ τῶν ἄλλων δυνάμενα τὸν κοινὸν βίον ὑφελθεῖν). The next step was to discover arts and to develop their civilisation. Democritus at the end of this fragment, found in Diodorus’ history, gives emphasis to hands, reason and *anchinoia* (sagacity of soul) as the main contributors of human progress, but also points out the importance of necessity for the creation of the first society.

(Diodorus of Sicily, I.7; trans.Oldfather).

¹⁵Guthrie, 1957, p 18.

1.3. Living the bestial life

Let me now trace the account in Diodorus Siculus with Democritus' views conveyed in other fragments. Analysing the story the first thing to note is that people are presented as weak and threatened by the beasts. Actually, they were also living *?ν ?τάκτω και θηριώδη βίω*, which means that at this phase human beings were acting similarly with animals. However, this animal state became later the threat of the civilized human beings. Strictly speaking, Democritus in fragment B258 and B259 points out that the ordered life must be protected from “specific animals”, from human beings who choose the “bestial” life. Apparently these “animals” refer to people who fail to comply with the dictates of the ordered life and commit crimes. Therefore, returning back to the animal state is forbidden and this prohibition reveals the strong antithesis between law and nature.

1.4. Fear

In the text, this process, from the primary state to civilization, is triggered by the power of fear. Fear is the basic emotion for all animals, including man, which involves the perception of danger and responds as a mechanism to threatening situations. In humans, fear is controlled by the process of cognition and learning. In Diodorus' fragment people are motivated to join each other (*?θροίζοντες*), because a cognitive process (*φόβον ?πιγινώσκειν*¹⁶) takes place, which is connected with the emotion of fear

¹⁶*?πιγινώσκειν* means that I am aware of something from being an eyewitness. I suggest that only someone who believes that senses are crucial for knowledge would choose the verb *?πιγινώσκειν* instead of *γινώσκειν*. Here, visual perception contributes to a cognitive process. Democritus acknowledges the importance of sense perception (eyewitness) and experience (fear) for learning. Indeed, in B125 Democritus personifies the senses and the mind for stressing the role of senses to knowledge: “Miserable Mind, you get

and its causes. People were able to observe their own fear. In the case of the other animals, when they feel threatened, they do not have the cognitive grasp of their emotion. Therefore it is fear, which triggers the adaptive behaviour and people take advantage of being aware of it. This claim is also supported in B215 when Democritus verifies that the fear of injustice can be the “end of calamity” (ἡ δίκης δεῖμα συμφορᾶς τέρμα) meaning that the power of this emotion led human beings to *desire* to live in an ordered state¹⁷.

1.5. Language

The desire of people to have prosperity drove them to assemble together and to create the first method of communication. After expressing themselves through gestures and sounds, they consent to have a specific language. Language is not essential in human beings and this view is compatible with Democritus’ thesis about names.¹⁸ Names are just conventions,¹⁹ results of coincidence and do not have natural correspondence with physical objects.²⁰ As Vlastos correctly points out, in Diodorus Siculus language is not a derivation of an innate, intelligible ability, but rather consent from people who articulate their sounds into meaningful words.²¹ This indication in the text enhances the possibility that Democritus is the hidden bearer of Diodorus views in 1.7 and 1.8.

your evidence from us, and do you try to overthrow us? The overthrow will be your downfall”.

¹⁷ In *Rhetoric* (1382b-1383a8) Aristotle seems to connect a *desire* for safety and deliberation with the emotion of fear and the possibility of prosperity. Similarly, in Diodorus fragment people seek for protection and cooperation because they feel threatened but also they hope that they can manage to survive if they live all together. David Konstan also remarks that “fear involves knowledge and inference” and that the absence of experiencing fear would be similar to cognitive deficit. Konstan, p.130-134.

¹⁸ In contrast Epicurus later contends that language is a system of nature. Vlastos, 1946, p.53.

¹⁹ In *Cratylus*, *Hermogenes* asserts the conventionalist view(383a-b).

²⁰ In B26 Democritus defends also the conventionalist view of names: In B125 Democritus also claims that qualities are conventional “Colour exists by convention, sweet by convention, bitter by convention”.

²¹ Vlastos here refutes the argument that the fragments 1.7-1.8 derived from an Epicurean source, as Philippson suggested. Vlastos, 1946, p.51.

1.6. Experience

The invention of language is not enough for people to make big progress, but it certainly contributes to the mutual understanding of experience. Experience is the great “teacher” of human beings (*ὑπὸ τῆς πείρας διδασκόμενοι*) during this pre-political stage. As I mentioned at the beginning of this analysis, human beings act more like animals and learn through the process of observation and experience. Similarly, Democritus in fragment B154 acknowledges the importance of observing nature and learning from the example of different animals: “we are pupils of the animals in the most important things: the spider for spinning and mending, the swallow for building, and the songsters, swan and nightingale, for singing, by way of imitation”. Furthermore learning from experience becomes also the transformative power of nature. In B33 Democritus asserts that *didache* is similar to *physis*. Instruction reforms men and through this transformation their nature can change. Hence, one can possibly assume that the first human beings changed their “bestial” attitude due to the beneficial character of experience. However, something is missing here: people must have, before experiencing, an innate ability to choose each time what is best for them, otherwise there would be no progress. This natural human ability is known as sagacity of the soul (*anchinoia*).

1.7. Anchinoia and Logos

Democritus refers to the sagacity of soul as the significant assistant of human progress. *Anchinoia* is the ability of human mind to find out what is best, what is *advantageous* each time for an agent. Aristotle in the *Nicomachean Ethics* defines

quickness of mind, or sagacity of soul, as the “important skill of conjecture” (ᾠστὶν δεῖσσοχία τις ᾠ γγίνοια 1142β5), which means that people, equipped with this skill, can proceed to execution of their decisions quickly. Therefore, the first human beings had the intrinsic ability to improve their conditions, due to their readiness to act immediately and in respect of variety of their experiences.

However, shrewdness is not the only contributor to human growth. In the text, reason is mentioned as also another natural characteristic of human beings (καὶ λόγον καὶ ψυχῆς ἀγγίνοιαν). It seems that quickness of mind would not assure alone the deliberating excellence (ἐβουλία), because *anchinoia* functions without conscious calculation. Hence, the successful result of learning from experience and transformation remains contingent using only shrewdness.²² Reason functions supplementary to shrewdness and contributes to an advantageous attitude towards life. An advantageous choice for Democritus is identical to what is pleasant (B188: the criterion of the advantageous and disadvantageous is enjoyment and lack of enjoyment), and this innate tendency does not require mental excellence or reflection. It is the very same tendency which becomes the teacher of the primitive men.

Thus, for Democritus, human beings were not superior compared to other animals because of their mentality: that is why they are presented living a bestial life. Their mental ability was improved due to their natural inclination towards advantage and always according to their experiences. Gradually, they learnt how to make reasonable

²²As Aristotle once points out *euboulia* infers reason because βουλόμενος ζητεῖ καὶ λογίζεται (the one who deliberates request and reflect on something, my transl.); N.E.1142b

choices²³ and finally established their social life.

1.8. Necessity and arts

At the end of fragment 1.8 Diodorus or Democritus refers to necessity (χρείαν) as the teacher for every activity. Similarly, fragment 144 states clearly that all arts are the result of necessity (ανάγκη) except the art of music. In this way, Democritus distinguishes his position from the belief that art is a divine gift to men as the older tradition was claiming. However, this kind of necessity is not similar with the mechanical necessity that takes place in the process of the universe, but it is similar to the way Hippocratic authors conceived the art of medicine as the outcome of necessity.²⁴ Art is not something irrelevant from the human bodily need, on the contrary it is connected to what body lacks and needs. Therefore, art- creation can be defined as man's ultimate attempt, imposed by nature, to fulfil what is needed to be done in favor of his advantage.

1.9. Macrocosm and Microcosm in Diodorus Siculus

The previous analysis of the sections 1.7 and 1.8 aimed to show that a) “macrocosm” and “microcosm” for Democritus are subjected to the same laws and b) social life is the result of necessity and convention.

a)Democritus' description of cosmogony corresponds with the seed, the nurture,

²³ Actually in B76 he says: for the foolish, not reason but advantage is the teacher.

²⁴ For the view that Democritus influenced the Hippocratic authors See, Miller, 1949, p. 192 and Schiefsky ,

the birth of a foetus, and the emergence of the ordered world. Accordingly, the primitive stage of human beings presupposes an ordered state because of the force of the same *necessity*. Just as the universe (macrocosm) moves continually, in the same way man (microcosm) is subjected to change and progress. Just as the atoms of the bodies compose the void by forming among themselves a circular pattern of motion, in the same way the atoms in human soul give life and transform human beings.

b)As far as society is concerned, it was the force of *χρείας*, which lead the first human beings to associate. The first association, as Vlastos correctly points out, was based on the political use of language (Vlastos 1946, 55-56). People consent in giving names and that was the beginning of their political agreement. People were alone and in danger, then they started to gather together and to know each other and finally they developed speech. Democritus presupposes that political society was an outcome of human evolution within the framework of natural necessity.²⁵

The stages marked in the prehistory of Diodorus Siculus triggered scholars to suggest that Democritus advocates a genetic theory for the human progress. More precisely Adam Beresford advocates that Democritus' theorizing of man's social development reveals an early account of something like the Darwinian theory.

Beresford bases his argument on the following suggestion: the story of Diodorus

2005, p.77 Miller also points the analogy between the notion of necessity in the Hippocratic corpus and that of *chreia* in 1.8 in Diodorus Siculus. Ibid, 190

²⁵I suggest that I can use the term necessity, not as mechanical, but as natural necessity. If at the first stage human beings *lacked of humanness* (bestial life) then what *was needed* was to be human beings. The process of change and the creation of the society are needed because otherwise people cannot survive. Since Democritus defines as the ideal state the end of cheerfulness then the progress towards this end-if not the achievement of the end- is necessity imposed by nature.

is attributed to Democritus and it is a literal version of the Prometheus myth in Plato's *Protagoras*. The myth hides the real views of Protagoras about human progress through natural adaptation. Therefore, Protagoras and Democritus are proponents of the same naturalistic account. More precisely Beresford brings evidence from a) the creation of the world through physical and materialistic necessity and the steady human evolution through cultural processes because of self-preservation, b) common vocabulary in both myths, c) the close relation between Democritus and Protagoras (Beresford, 2013, 2-8).

In the following chapter I will expand this view and argue for the connection of Democritus' and Protagoras' views based on the hypothesis that both of them serve an early account of the evolutionary theory.

2. Justice and Cosmogony in the *Protagoras* vs the era of Zeus in the *Politicus*

Gregory Vlastos argues that the myth of Prometheus in the *Protagoras* can be interpreted either under teleological or mechanistic terms. According to the latter suggestion, Adam Beresford claims that the myth of Prometheus is based on a biological theory, which has major moral consequences connected to humanism. Humanism treats morality as an exclusively human concern and refutes divine causation or intervention in human affairs. Beresford advocates that Protagoras conveys, under the veil of the myth, his genuine naturalistic views about the origins of the cosmos and the first society, based on an early theory of Darwinism. According to his interpretation, there are no traces of an early contract theory in the myth. He also points out the connection of Protagoras' naturalism with Democritus' account of the cosmos in Diodorus Siculus (1.7 & 1.8).

In this chapter, I first outline Beresford's interpretation and a similar position, suggested by Catherine Osborne, in favour of naturalism; I then present an alternative approach, which sheds light on the teleological reading of the myth. Finally, I argue against this teleological suggestion, connecting the philosophical perspective of the *Statesman* with that of the *Protagoras* respectively.

2.1. The myth of Prometheus in the Protagoras

The *Protagoras* deals with the teachability of virtue. The main interlocutors are Socrates and Protagoras. The first one defends the view that virtue is not teachable, while the latter believes that the *politike arete* can be taught. Protagoras, in order to refute Socrates' arguments, sets forth the Great speech, which is a combination of the Myth of Prometheus (320c–324d) and the Logos (324d2–328c2). For the purposes of this chapter I will focus on the myth.

In Prometheus' myth Protagoras refers to a hypothetical construction of the early human condition. The human race and the animal species are created by the gods and came into life from earth. They were living under danger and this is why they are endowed with the appropriate features in order to survive. The task of the distribution of these features is divided into two demigods, Prometheus and Epimetheus. Prometheus hands over the distribution to Epimetheus, who diligently cares for the protection of all other species, except human beings. Thoughtlessly throwing necessary equipment of survival he leads his brother, Prometheus, to steal the fire and art, their practical wisdom (321d), from Athena and Hephaestus to endow man.

Despite this endowment, there was no justice in the human species and men were dominated by disorder. The gods decided to give *aidos* and *dike* to them, so that the controversy can be settled in terms of an organized society.

2.2. Beresford's defence of naturalism in the *Protagoras*

The myth of Prometheus in the *Protagoras* is usually interpreted as a sample of naturalistic exegesis of the cosmogony and the birth of social life. Adam Beresford offers a detailed scenario according to which Protagoras defends humanism against Plato's view, which praises divine providence. Beresford's first step is to assume that the myth bears Protagoras' genuine opinions about the origins of living beings and the first society.²⁶ Taking into consideration Protagoras' agnosticism,²⁷ Beresford suggests that the presence of the Gods in the myth serves a symbolism of naturalistic explanations regarding the progress of humanity. This suggestion leads him to connect the myth in the *Protagoras* with the description of prehistory in Diodorus Siculus, described in 1.7 and 1.8, and to point out Protagoras' influence by certain Presocratics and atomists. In short, the presence of the gods is interpreted as part of the form of the myth, which is usually considered as a sample of Ionian rationalism.²⁸

More precisely, Beresford agrees with William Guthrie, who stresses the consensus among the thoughtful minds, during the sixth and the fifth century, concerning the inquiry about nature as the main source for understanding the world. Great intellectuals, including Protagoras, were proponents of this kind of humanism. Guthrie also points out that, most probably, the source of Diodorus Siculus is Democritus. Thus,

²⁶Probably Protagoras' lost treatise "On the Original Condition" refers to his naturalistic views presented later by Plato in his eponymous dialogue.

²⁷"Concerning the gods, I have no means of knowing whether they exist or not or of what sort they may be, because of the obscurity of the subject, and the brevity of human life" (DK 80b4).

²⁸Beresford, 2013, 140.

Beresford assumes that Protagoras transmits the naturalistic views of Democritus, through a myth. Evidence²⁹ for this connection focuses on a) the creation of the world through physical and materialistic necessity and the steady human evolution through cultural processes because of self-preservation, b) the common vocabulary of both myths, and c) the close relation between Democritus and Protagoras³⁰.

2.3. Protagoras' agnosticism and the symbolism of gods in the myth

Taking into account the agnosticism of Protagoras, the myth can be seen as an attempt to give a naturalistic argument concerning also human ethics.³¹ The starting point for this claim is to assume that Plato has reasons³² to bear the genuine opinions of Protagoras in the dialogue and that the myth of Prometheus is an excuse to expose the views of certain pre-Socratics. Therefore, Beresford asserts that Protagoras is a proponent of a naturalistic tradition, which is completely opposite to Plato's teleology and morality.

Furthermore, the symbolism of Gods and their role in the myth and shed light on

²⁹ibid, 140-141.

³⁰There is a biographical tradition, which makes Democritus older than Protagoras and Protagoras a protégé of Democritus biography. See Mi-Kyoung Lee, 2005, 182.

³¹ibid, 139.

³² Plato probably finds in the face of Protagoras the whole tradition of the *physiologoi*, who give naturalistic explanations to the universe and impose the opposite ethical view from his philosophical instructions. The dialogue is an opportunity for Plato to show that morality under the terms of naturalism leaves room for contingency. Aristotle in *Metaphysics* 986b calls *physiologous* those who inquire nature, for instance,

the evolutionary implication of the story. Beresford suggests that Epimetheus (along the lines of the etymology of his name, which means afterthought), who is presented as someone who acts carelessly and learns from his mistakes, may be taken to anticipate the argument we later find in Lucretius *De Rerum Natura*. His argument is based on two important remarks. On the one hand, using his allegorical language, Protagoras explains the accidents of nature, the monstrosities,³³ and the process of natural selection. The hardest organisms in nature survive, and this view does neither necessitate any divine plan, nor any cosmic providence; however, it reveals Protagoras' commitment to the opposite theory, that of the biological evolution of species, process, which is closer to the atomist Democritus.

On the other hand, the symbolism of Epimetheus in the myth is considered as the absence of providence in Lucretius. The animals presented in the *De Rerum Natura* are equipped by nature with everything they need to survive. Their survival is the criterion that Epimetheus also uses for distribution.³⁴ But neither does Prometheus stand for divine providence. The moral of the story is that 'our own intelligence and foresight, our ability to think ahead' is not a gift given to us by god, but rather an ability that we need to develop in order to survive.³⁵

According to Beresford's interpretation of the myth, Protagoras attempts to show that in the primary state human beings are not superior to other animals, and that human intelligence is developed merely as a tool. In contrast to the animals, whose particular

Thales, Anaximander, Anaxagoras, Anaximenes, Archelaus and Diogenes of Apollonia.

³³ Beresford, 2013, 144.

³⁴ *ibid*, 145.

tools enable them to act in specific ways, the particular human tool of intelligence creates the possibility of free choice, which involves the idea that we ‘think in order to live’.³⁶ This idea ties in with Protagoras’ relativism expressed in the claim that “man is the measure of all things”. We adopt a way of thinking in our pursuit, that is to survive, just as any other animal does. The pursuit in the primary state is our survival.

The instrumentality of intelligence implies thus a form of relativism; this realization can also be combined with Democritus’ view of the advantageous life. As we have seen, the story in Diodorus Siculus conveys the idea of choosing what is best for survival. Linked to the advantageous attitude to life is also the theory of language as a convention presented in Diodorus’ text; this link enhances the faith in relativism, if we take into account that each nation developed its linguistic communication, customs and laws.³⁷

Furthermore, this attitude to life is certainly opposed to Plato’s deontological argument, which turns on our commitment to moral principles. In Plato’s view, we ‘*live in order to think*’.³⁸ First, we get a clear illustration in Plato’s cosmology in the *Timaeus*; there, a superior Demiurge creates man in order to follow his rational orders to live as a philosopher.

³⁵ *ibid*, 147.

³⁶ *ibid*.

³⁷ The same thesis we find also in the *Cratylus*. In 385d-e I suggest that *Hermogenes* shares Democritus’ common ground regarding the conventionalism of language. Plato never mentions in the dialogue Democritus’ name. This statement allows for Hermogenes to be an advocate of Democritus’ doctrines, which have close affinity with Protagoras’ views but are incompatible with his ontological relativism. For Democritus’ view see B26

2.4. Is morality *nomoi* or *physei*?

Let me now return to the most crucial point of the myth to point out the ethical doctrine of Protagoras. According to the story, after stealing the practical wisdom of gods, humans entered a pre-political stage. They found religion and developed language and arts in order to satisfy their basic needs. However, at this phase there were no cities. Zeus provides them with shame and justice (322c: αἰδῶ καὶ δίκην) because men *seek* to be together and not being in a state of disorder.

Aidos and *dike* are social emotions because they depend on social interaction . Both of them contribute in mutual understanding and respect. *Aidos* is the emotional response of feeling embarrassed or guilt when I act inappropriately. It is mainly passive emotion but it can be also active, after the personal process of reflection, and creates self - control. *Dike* or justice is the sense of fairness, which takes place when we feel that someone is treated unjustly. It is manifested with pity to the victim or with anger to the guilty agent. The social emotions are psychological responses that have cognition value. Within the framework of the myth Zeus decide to endow people with *aidos* and *dike* to give them the opportunity for mutual understanding and to establish the social order.

Here is the key point where scholars remark the constitution of political society and the foundation of the social contract.³⁹ However, social contract theory does not imply biological terms and this is more than obvious, if we take into consideration two other dialogues of Plato, which traditionally express conventional morality. In *Gorgias*, Callicles defends the natural amorality of human beings and stresses the tyrannical

³⁸ *ibid*, 147.

character of laws.⁴⁰ A similar position is adopted by Glaucon in the second book of the *Republic*, supporting the selfish human conduct.⁴¹ Both examples base the foundation of political society on an antithesis between *nomos* and *physis*.

If this antithesis is necessary to assume an early argument for social contract theory, and if the myth in Protagoras is a typical example of this, as Nicolas Denyer claims, then we must find evidence for the contrast of human nature to the social compact. A closer examination of the myth leads us to the conclusion that the text does not refer to a selfish or aggressive or immoral human character in the primary state and there is no reference, after the social compact, to the oppression of laws against our nature. Instead, we find the words: *ζητουν δ? θροιζεσθαι κα? σ?ζεσθαι κτιζοντες πόλεις· τ? ο?ν θροισθε?εν, ?δίκουν⁴² ?λλήλους ?τε ο?κ ?χοντες τ?ν πολιτικ?ν τέχνην, ?στε πάλιν σκεδαννόμενοι διεφθείροντο.* (*Protagoras*, 322b)

I do not deny that this passage (322b) implies human beings' natural necessity to constitute political foundations. However, I claim that this constitution was a result of something analogous to a biological process and not an outcome of 'rational' calculation. In short, men have the tendency to be just or unjust and their survival is based on emotional dispositions rather than rational abilities. In continuation of this aspect, it is

³⁹ Denyer, *Protagoras*, commentary on 320 C 3–328 D 2.

⁴⁰ Plato, *Gorgias*, 483 b 4–c 8.

⁴¹ Plato, *The Republic*, 358 e 3–359b 5.

⁴² *?δίκουν* does not mean necessarily that human nature is aggressive or selfish. It may stress the lack of art of human beings to arrange their social affairs. Therefore here there is no an antithesis between *nomos* and *physis*, which is necessary condition for a social contract theory like Plato had in mind. It might be supported that this is a social contract theory like the one we find in Hume and that *aidos* and *dike* are the natural emotions that lead people to the agreement. But then, Denyer's suggestion is not sound because he places the social agreement when Zeus distributes *aidos* and *dike*. For a Humean interpretation of the myth see, Farrar, 1988, p.90 and the opposite view see, Denyer, 2008, 107-108.

essential to further explain the symbolism of characters in the myth according to Beresford's interpretation.

a)Prometheus represents our ability for inventing, but he is not in charge of donating humans' moral aspect; that is why he is not the god who provides us with justice. If morality was linked with our rational ability then Prometheus would be also responsible for delivering justice.

b)Zeus is the god attributed with the highest authority; he takes the responsibility to distribute justice in order to save the human race. Zeus represents our inner capacity to govern ourselves, our internal authority. As he commands all the other gods, who represent human characteristics (Athens, Aphrodite, Hephaestus and so on), in the same way morality metaphorically governs our conduct.

Along these lines, shame and justice are understood as tools for survival in the same way as cleverness before. *Aidos* signifies our consciousness turned on by guilt when we treat other people unjustly. Similarly, *dike* represents our annoyance provoked by what is perceived as unfair treatment. Both of them activate spontaneous reactions and this spontaneity marks the dividing line from a rational plan, which serves our self-interest. Therefore, morality is not an inference of our cultural development, meaning our rational evolution;⁴³ rather it is developed through natural aptitude: our natural instincts are the

⁴³ Beresford, 2013, 159.

endowments we need in order to survive. Those men who do not have them by nature⁴⁴ perish. Thus, our moral conduct follows the natural procedure just as in the case of physiology.⁴⁵

Hence, the theory of evolution in the myth of *Prometheus*, and correspondingly in the account of prehistory in Diodorus Siculus, describes the process according to which first men equally, as all the other beasts, started their life. The natural environment at the beginning was “hostile” to man, and people were in danger and subjected to extinction. In due course, because of their natural dispositions and common experiences, they developed a basic form of morality and they became more resistant to threats. Minor changes occurred (their cooperation, their resistance to dangers by inventing their arts and their moral conduct) that enhanced their humanness and from generation to generation, through the process of time, the human species inherited biologically the fundamental principles of morality. This gradual transition of natural and cultural features led to the transformation of bestial men to a new species, the civilized human beings.

One might suggest that this approach leaves room for determinism. It seems to me that Beresford’s interpretation reveals an optimistic, hopeful scenario for the human race: people become more and more moral, more and more just and this is something transmitted from the past generations to the future ones. Indeed, Beresford does not refer to teleology, because he assumes that Protagoras’ naturalism follow Democritus’ mechanistic views, so there is no room left for teleology. But I suggest that it might be the

⁴⁴ The theory of natural selection allows also mistakes in nature. Similarly attributing this endowment to nature allows for the existence of individuals lacking this capacity.

⁴⁵ *ibid* 155.

notion of necessity, which will lead to a better world. It is necessary to be moral because our nature imposes its law.

2.5. Morality: the bond of Nature and Nurture.

Up to now, it has been shown that morality is a natural instinct, rather than a product of conventions. However, is our natural disposition sufficient in order to become moral subjects? And if it is, what is the role of education for our ethical development? Even if our morality derives from our natural disposition, it is insufficient to change into moral conduct automatically.⁴⁶ It is an inclination subjected to further cultural processes. Taking into account that Protagoras defends the teachability of virtue, the plausible scenario would be that the two parts of the Great Speech, *mythos* and *logos* would be separated. The first one would refer to natural endowments, while the second to social ones. But this distinction is pointless if we understand that nature and education are connected and both of them actively encourage our moral progress as a whole.

The holistic view of human progress presupposes that education is accessible to all citizens from their childhood. Beresford claims that Protagoras conceives moral education as habituation (ἥξις) rather than guidance. For this reason he employs examples from ordinary, social and political life to stress the importance of education in a human's

⁴⁶ ἀ?τ?ν ο? φ?σει ?γο?νται ε?ναι ο?δ?από το? α?τομάτου Plato, 323c.

life.⁴⁷ Consequently, for Protagoras moral instruction is the practice, which establishes justice in human nature.

2.6. Providence of Nature or Divine providence in the myth?

Another alternative to the Protagoras' myth is to take into account Herodotus' view about nature as a parallel.⁴⁸ I would like to turn to a passage from Herodotus, which seems to belong to the same tradition as the story of Prometheus.⁴⁹ In book III of *Histories* Herodotus draws attention to the variety of natural species. He is impressed by the fact that these species do not disappear, without being numerous. He gives the particular example of some mythical animals in Arabia, which look like winged snakes and gather frankincense from trees.⁵⁰ These, in large numbers, would be a threat to humans if, on account of their nature, females didn't kill males, and if young infants didn't injure their mothers in order not to have other offspring. The detailed account concerning these snakes can be seen as part of the broader interest in the concept of

⁴⁷ Plato, 325c-d Aristotle also believes that moral progress is a combination of nature and practice. It is possible that Protagoras might influence Aristotle's moral doctrines. Ibid, 151.

⁴⁸ This interpretation is mentioned by Vlastos (1945, 57) ,see also Osborne (2007)

⁴⁹ This is not surprising, since Protagoras and Herodotus were contemporaries but also co-founders of Thourioi.

⁵⁰ Herodotus 3.107-109 .

physis that marks Ionian rationalism. Although Herodotus does not give us an evolutionary theory, the similarity with the myth of Protagoras is striking, concerning the economy of the species. Both texts refer to the fertility of animals and they give detailed examples concerning the prolific and the unprolific species. Obviously, this reference is not an implication that Nature's providence conduces to mankind's help and comfort,⁵¹ but rather an indication of the survival of all species.

In contrast to Herodotus' description, which refers only to nature's economy and not to human status compared with animals, Protagoras' myth does not present Nature's greatness, because man is described as neglected and weaker than the beasts, at least at the beginning of the story. Therefore, human beings are not superior compared to animals, even if they are endowed with reason. According to the role of human beings in nature, Catherine Osborne suggests that Protagoras assumes either that there is equality in nature and man is just like any other animal, or that nature does not act like a «mother», but as a «step mother» and treats mankind unfairly. Both suggestions explain why people learn to strive and what survival means in each case. In the first case man acts according to his normal «brutal» *physis*, while in the second human strife becomes necessary and every aggressive and selfish action, in favour of the unprotected human beings, is justified because of the injustice. Comparing Protagoras to Herodotus, Osborne draws attention to an early conception of "Nature as provident, equipping us all alike with

⁵¹ Xenophon in *Memorabilia* 4.3.10-11 presents Socrates as a supporter of divine providence, arguing in favor of cosmic intelligence within an anthropocentric, early teleological approach. The genesis of animals contributes to human survival. Their importance, as creatures of nature, is evaluated to the extent that they and their products serve to the advantage of the human being. Socrates presents the world's perfection as a result of Divine intelligence and providence which works in favor of the superiority of the human race, putting at its service the entire natural environment. See, Sedley, 2007, 82 and Festugiere, 1990, 78.

survival factors in a “world of unrivalled beauty, artistry, and balance”.⁵²

However, Herodotus’ reference to providence (το? θείου ? πρνοοίη) somehow complicates the issue, though such an account is probably misleading. Nevertheless, Herodotus and Protagoras clearly presuppose a common tradition, there is no argument in Herodotus (he could be drawing on a more elaborate argument to which he was exposed). It seems to me that Herodotus may be drawing on an earlier non-philosophical tradition suggesting the presence of divine providence,⁵³ which he combines with some early observations concerning the economy of the species. It is worth pursuing further the possible influences Herodotus might have from literature and art. But there is certainly an important distance between Herodotus and Protagoras, since only the latter offers an argument, which does not rest on providence or divine intervention.

On the other hand, one can possibly assume that it is God behind the arrangements in nature. Correspondingly, the myth in *Protagoras* might be seen as Plato’s attempt to show that the ordered life is the result of God’s omnipotence. Some scholars defended the teleological interpretation⁵⁴ in the *Protagoras*, mainly based on the reference to *man’s affinity with Gods* (322a3-8).

Shedding light on this view it is important primarily to explain the role of the myth. The myth, under this light, serves the causal role of the moral of the dialogue and this is Plato’s pattern, a literary technique employed in his dialogues.⁵⁵ Hence, in order to

⁵² Osborne, 2007 p.37 .

⁵³ This may be what Prodicus has in mind when he says that Gods do not exist and that people in the past deify the crops and all useful for life. (DK, 84B. 5).

⁵⁴ Thein, 2003, p.64.

⁵⁵ Plato uses myths within his economy. In *Phaedo* he gives the eschatological myth to suggest the

defend teleology within the framework of social life, *Protagoras* must start from the creation of the society and the primary state of the first human beings. The time capture is necessary for the plot and the aim of the story: the brutal being is created to become *at the end* the political entity.

Moreover, taking into account the way that living beings came into life -man is moulded by the Gods- we can assume that the creation of men is similar with the creative process of the Demiurge. In the *Timaeus* the Craftsman mixes earth, fire and water to form the human body (ταῦτα μὲν διανοηθεῖς ὁ κηροπλάστης ὕδατι μὲν καὶ πυρί καὶ γὰρ συμμείξας καὶ συναρμόσας, σάρκα γῆχυμον καὶ μαλακὴν συνέστησεν, 74c). This formation is also explained in the *Protagoras* as the theomorphic view of the human body; therefore, people are motivated to pray to Gods, because of their bodily affinity with them, before even starting to communicate.⁵⁶ The religious art precedes all the other arts in the myth, because people owe to God their existence. There is an innate human tendency to create images of the gods, presented in statues, before they exercise other arts.

However, the affinity with the divine features is not enough to protect human beings from the menaces. Yet, Prometheus distributes unequally fire and wisdom, because these elements are dependent on body and individual inclinations, and fights begin among men. The intervention of the gods is necessary, again, in order to prevent the human beings from the possible extinction. Zeus and Hermes offer universally *aidos* and

appropriate way to live. In the *Timaeus* he describes the creation of the world to offer a teleological argument through a myth. Ibid, p. 61.

⁵⁶ ibid p.63.

dike to balance the inequality and to establish friendly bonds among the people. For those who do not obey these two values stay in a bestial life and are punished as an example to the others.⁵⁷

Theiler suggests that Zeus gives *aidos* and *dike* because of people's affinity with the Gods and because of their respect to them. He also stresses that although all have the potentiality to be just, nature is not enough to protect from injustice. That is why, human beings need political interaction and punishment; and these two activities have educational character and develop only in the *polis*. Hence, the state of citizens become the end of the primordial first, men.

Both interpretations (naturalistic and teleological) do full justice to Vlastos' suggestion that the myth of Prometheus on its own does not bring evidence for naturalism. It depends on the reader in which way he would like to interpret the story. However, a closer examination of Plato's *oeuvre* does not justify his supposed motivation to give a teleological scenario through the myth, but rather explains Protagoras' intention to cover his naturalistic views under the veil of the religious vocabulary.⁵⁸ Evidence for this assumption is Plato's need to offer a further explanation about the birth of living beings and the social life in another dialogue, namely the *Statesman*.

⁵⁷ Theiler here connects the theory of punishment in the Protagoras with Democritus' fragments related to justice DK 258-260 *ibid.* p. 68.

⁵⁸ Protagoras uses the religious vocabulary mainly because he does not want to provoke dislike to the Athenian public; actually, he belongs to a certain intellectual cycle which refutes the theomorphic conception of Gods and believes in another kind of religiosity, which praises the faith in higher human values like goodness, self-sufficiency, etc. According to this view one might suppose that Plato has many reasons to oppose to his thought in the myth of *Statesman*. For the view of the "religious agnosticism", see

2.7. The myth of Cronus in the Statesman

Indeed, the story of the creation of the world is highly elaborated in the *Timaeus*. However in the *Timaeus* there is no mention about the pre-political and the political condition of human beings. Plato refers to the first living beings and their life in the *Statesman*. But while he employs naturalistic terms similar to those found in Diodorus Siculus and in the myth of Prometheus in the *Protagoras*, in the *Statesman* this naturalistic vocabulary is contained within a non-naturalistic mode of explanation.

First, the myth is part of the discussion between the Eleatic Stranger and the young Socrates. They are looking for the definition of the *true*⁵⁹ statesman or of the king. So, they try to define him through the method of division. They agree about the shepherd, but this shepherd cannot have the endowment to be the raiser of the herd. Hence, they attempt to find the “one” who has the distinguished feature (*episteme*) for being the king. In order to do this, the Eleatic Stranger refers to a myth, which is divided in three parts. The first one is that of Atreus and Thyestes, in which Zeus orders the sun and the stars to rise and to move in opposition to their usual orbits. This opposition stresses the change in the revolution of the universe from the previous one; that is, from East to West, to the reverse, from West to East. The second part describes the reign of Cronus on Earth, while the third one is about the generation of human beings; they were born from the earth without going through sexual reproduction.

Bolonyai, 2007, 264.

⁵⁹ Truth for Plato is identical to knowledge and knowledge is similar to *arete*. Thus, the one who has access to truth and knowledge is the noble person. See *Laches* 199a and *Protagoras* 360d.

For men, deprived of the care of the deity who had possessed and tended us, since most of the beasts who were by nature unfriendly had grown fierce, and they themselves were feeble and unprotected, were ravaged by the beasts and were in the first ages still without resources or skill; the food which had formerly offered itself freely had failed them, and they did not yet know how to provide for themselves, because no necessity had hitherto compelled them. On all these accounts they were in great straits; and that is the reason why the gifts of the gods that are told of in the old traditions were given us with the needful information and instruction,—fire by Prometheus, the arts by Hephaestus and the goddess who is his fellow-artisan, seeds and plants by other deities. And from these has arisen all that constitutes human life, since, as I said a moment ago, the care of the gods had failed men and they had to direct their own lives and take care of themselves, like the whole universe, which we imitate and follow through all time, being born and living now in our present manner and in that other epoch in the other manner.⁶⁰

This myth relates the reversal of the movements of heaven and earth and the changes that emerged. Before the reversal, every herd of living creatures was protected by a heavenly daemon. The herds were all under the authority of Cronus, and they were living in a state of abundance. The reversal changed men's wealthy life condition: while Zeus was governing as the king-God, the daemons left the human herds and wild beasts became a threat for men. People were obliged to take care of their survival. Yet, they did not have fire and arts, until some gods felt pity for them and helped human beings by

⁶⁰ Plato, *Statesman*, 274b-d, transl. Fowler.

giving them the fire and the arts.

The Eleatic Stranger believes that the Demiurge creates the Universe from disorder and sets it to a state of order⁶¹. Then, he revolves it- and this consists the first revolution of the universe- and lets it free when he decides – that is, in the opposite direction from the previous one. Consequently, God has a change activity and intervenes to the cycle of cosmic life.

Nevertheless it is worth inquiring what the cosmological myth has to do within a dialogue, which deals with ethics and politics.⁶² I suggest that the myth in the *Statesman* could be assessed as a foil to what we have in the *Protagoras*. Both dialogues deal with the inquiry of *arete*. In the *Protagoras* the sophist defends that he can teach prudence to his students and that he can nurse them to be good citizens (318e-319a).⁶³ Protagoras argues for the teachability of virtue within the framework of the political state, using the description of a pre-political, primordial stage. I argue that the dialogue serves Plato's aim: to present the relation of the naturalistic tradition about the origins of the first men and the society -an issue which was mainstream to the intellectual circles and triggered Plato's interest- with the failure of the existent political system to educate noble citizens.

Furthermore, Plato is aware of his opponents and gives the best version of the naturalistic account, conveyed by Protagoras, to argue that, even if people are potentially just from nature, it is doubtful whether they are going to be noble after their social

⁶¹ Christian Platonists later argued that the myth in the *Statesman* symbolizes the creator God and his intervention to the cycle of life. That automatically means that they can also argue against the eternity of the world advocated by the pagan philosophers. See, Dillon, 1995.

⁶² Recent scholarship has defended that the dialogue is mainly ethical and political. See, Rowe, 1996, 160.

⁶³ Good citizen during the fifth century was similar to noble person.

education in the existing political system. This doubt is affirmed by the fact that *Protagoras* does not give an answer to the main question whether the *arete* is teachable; the dialogue ends with *aporia*.

Now, I suggest that Plato in the *Statesman* gives the answer for the origins of human beings and the cause of political disorder to all of his opponents who believed in humanism, in the participation of the majority to political deliberation and the reconsideration of ethical and social norms. To support my thesis I bring the following evidence:

a) In the *Statesman* Socrates searches for the best *politicus* who has the knowledge of *politike techne*. It is obvious that Protagoras did not convince that he can teach *arete* to his students (note that in the *Protagoras*, Protagoras and Socrates both agree that *arete* is knowledge; but they do not define what knowledge is.)

b) The definition of the best statesman is an outcome of a dialectic process (through the route of division). There was no such process in the *Protagoras* because on the one hand the purpose of the dialogue was to express the opposite view, and second the dialectic process is not yet developed in the first dialogues.

c) The best statesman cannot be found among the existing people, because this absence gives the pretext to Plato to respond to the naturalistic view about the origins of cosmos and the morality.

d) Plato uses similar analogies to those found in Diodorus Siculus and in the myth of Prometheus: cosmology and cosmogony serve the explanation of the order and the

disorder in the social life. Plato uses the vocabulary of cosmology to refute the mechanistic process of the universe and then he refers to the bestial life of human beings not as the primary state of living beings, but as the subversion to a secondary stage, to a lower level of existence. People living in the present era, that is the era of Zeus, suffer because God releases his government of the universe. During the Golden age, that is the era of Cronus, men were enjoying happiness, because God was in charge of the rotation of the universe. This connotation entails that politics take place where God is absent and there is injustice. While the universe has autonomy, political life has reason to be established.

All the above suggestions reinforce the scenario that the two dialogues, the *Protagoras* and the *Statesman*, correspond to each other and serve Plato's philosophical reasons. Let me now turn to the discussion of the scholarship about the interpretation of the myth in the *Statesman*.

It is supported by the scholars that Plato implies that the universe during its cosmological autonomy has the intelligence to arrange also political issues in social life,⁶⁴ meaning that the laws of the universe affect the laws of the earthy life. However, this is an overoptimistic view. A closer examination of the text reveals the continuous (274c5-d1) decay of the universe and accordingly the worst scenario for the political life. In addition, the quest of the ideal statesman complicates the issue because it is contradictory to find the perfect leader within the framework of decadence. My suggestion is that

during the Godless period we cannot find the best “shepherd”: that is why we are obliged to obey the laws. Or that even if there is not now an expert in justice, the path of dialectic method is the opportunity to affiliate our mortal with the divine nature and to become, at the end, the proper leader-philosopher to govern.

The crucial point to this analogy between the *Protagoras* and the *Statesman* is that the latter dialogue excludes the teleological interpretation of the myth of Prometheus, suggested by Vlastos and other scholars. Plato makes clear in the *Statesman* his intention to refute the non-teleological approach defended by the proponents of naturalism. That is why he stresses that the era of Zeus is godless and the universe is moving on its own. Without Demiurge there cannot be teleology and an optimistic scenario for the world. Therefore, people are presented as weak, unprotected and in misfortune and the explanation for the earthly birth, the striving of man and the unjust social life cannot be the inference of naturalistic causes but rather an absence of God’s Providence.

Prompted by this challenge, in the third chapter of my thesis I will argue against Plato’s suggestion that moral decay is the outcome of the absence of divine providence. I will explicitly analyse Democritus and Protagoras moral views arguing that although they serve different accounts they are deeply “religious” in another sense than Plato’s philosophy imposes.

⁶⁴ Lane, 1998, 103-104.

3. Considerations on naturalistic ethics: individual vs. social virtues

My aim in this chapter is to shed light on the moral consequences of Democritus' and Protagoras' naturalism. Although scholars have traced the connection between the two intellectuals, I argue that they defend different accounts of humanism. More precisely I claim that Democritus' moral doctrines relate to his physical theory, while Protagoras suggests a pragmatic view of morality. This differentiation lies upon distinctive results; in Democritus' case morality implies the strength of self-reliance and autonomy, while in Protagoras' case it infers the power of the advantageous choice and the impact of collective deliberation.

3.1. Democritus morality: The power of individual

Unfortunately, Democritus' ethical work has not been preserved as a whole. For this reason it is doubtful whether we must consider his ethical statements constituting to some kind of anthropological, psychological and naturalistic theory. But since there are fragments that are attributed to him, there must be some basis on which he considers his moral doctrines⁶⁵. As I tried to show in the first chapter, Democritus conceives human

⁶⁵Guthrie has pointed out that Democritus' influence is obvious in Aristotle's ethics although Aristotle

nature as a “micrograph” of the bigger mechanism of the universe; “microcosm” is the man who is similar to “macrocosm”, the universe. This mechanistic conception of human nature, including the body and the material soul, implies the connection of ethics to physics:⁶⁶ men are naturally subjected to change and act in order to adapt each time to the effects of changes. Hence, one would expect that the *necessary* natural laws would act deterministically to human moral behaviour. But this interaction is more complicated: the condition of the soul can affect the bodily state and vice versa. Indeed, in the case of a soul formed by atoms, the plasticity of man, his capacity for adaptation, presupposes and implies his ability to **reform** also soul’s physiology; human deliberation can improve or degrade the quality of atoms in the human soul. However, the improvement or the decadence of human character is an outcome of man’s free choice.

Before I continue with the moral inferences of Democritus’ doctrines it is necessary to explain what is the role of soul to the creation of human morality and the importance of the interaction between psychology and biology to the individual. For the purpose of my argument I will follow Cynthia Farrar’s suggestion regarding Democritus’ individual morality,⁶⁷ and I will extend her view on social ethics and particularly in relation to the significant notion of shame as self-sanction.

refers to Democritus as the philosopher of natural sciences. Aristotle recognizes Socrates as the founder of ethics. See, Guthrie, 1969, p. 492. Against this view see Dudley, 1981, 373

⁶⁶ For his insistence to necessity, Epicurus has accused him for fatalism. But I think that this point is misleading. The kind of determinism, which Democritus implies, is connected to the continuous change and progress and consists in the freedom of choice. People are determined to change but it is in their choice to improve them selves or to be demeaned. I agree with Cynthia Farrar that Democritus’ theory does not imply reductionism, determinism or skepticism. For the details of this view see Farrar, p200.

⁶⁷ Farrar (1988) follows Vlastos’ view that Democritus’ ethics are depended on his theory of physics. There is a quite debate among the scholars for the issue. Vlastos’ argues against Baileys’ view which is expressed in these words: Democritus’ ‘ethic’ hardly amounts to a moral theory; there is no effort to set the picture of the ‘cheerful’ man on a firm philosophical basis or to link it up in any way with the physical system”.

The importance of human soul to moral and social life is crucial in Democritus' system mainly for one reason: the welfare of the individual. As individual, Democritus understands the uniqueness of each person but also the distinguished characteristics of man qua human being. Therefore, man is identified as a whole through two definite processes: the realization of his distinctiveness as individual and as creature of the cosmos.

Both of these realizations are based on the reform of the soul and are steadily developed. As it is described in the account of prehistory of Diodorus Siculus (1.8), during the primitive stage, human beings are in a bestial level of life psychologically and biologically; this primitiveness, identified as *lack* of humanness, is the implication of the unrefined atoms of the soul. The soul has the main capacity of diffusion⁶⁸ to the other compounds of the intellectual (perception and understanding). Therefore, the “rough” quality of atoms leads accordingly to the instinctive, behavioural reaction: the emotion of fear and the motivation of self-interest.

However, the soul has also the ability of *refining* its constituents (? γνησίη ?άτε ?ργανον ?χουσιν το? ν?σαι λεπτότερον, DK B11). This process of culture emerges mainly through the experience and the sagacity of soul and has a temporal dimension. The end of this refinement is when the soul reaches the state of cheerfulness (ε?+θυμός=ε?θυμία) and wellbeing (ε?+’έστω=ε?εστώ).⁶⁹

Vlastos, 1945, 578.

⁶⁸ *ibid.*, p. 227.

⁶⁹ The first is the ideal state of the soul while the second reflects the best quality of the atoms. According to Vlastos' suggestion, Democritus was much influenced by the medical treatises. These treatises recommended that mental health is connected to the balance of the elements of the body. Correspondingly, Democritus assumed that *logos* is more important to the soul though any bodily disturbance can also affect

The individual happiness, as the final end of the culture process, is connected with a fearless state ($\theta\alpha\mu\beta\acute{\iota}\alpha$); it is also identified as the equilibrium in the psychological and the biological status of the individual. The ideal human balance is considered as the stable state of equanimity and self-sufficiency:

Cheerfulness is created for men through moderation of enjoyment and harmoniousness of life. Things that are in excess or lacking are apt to change and cause great disturbance in the soul. Souls, which are stirred by great divergences, are neither stable nor cheerful. Therefore one must keep one's mind on what is attainable, and be content with what one has, paying little heed to things envied and admired, and not dwelling on them in one's mind: DK B191.

This fragment refers to moderation as the accurate “path” towards well-being. It is not the resignation from the desires that gives rise to individual’s well-being, but the avoidance of being emotionally extreme. In addition, the atoms of psyche interact accordingly keeping each other also a “moderate distance”.⁷⁰ Body, mind and soul can be content while being under the self-control.

Self-control is accomplished through the powerful emotion of shame. As we have seen in the second chapter, Protagoras stresses the role of *aidos* and *dike* to the establishment of justice in the individual and the society. Protagoras perceived *aidos* as

the soul. For instance, the sweet flavor "disturbs" and "leads astray" atoms with which it comes in contact; "moistened and moved out of their order they flow into the belly" (Theophrastus *De Sensu*, Par. 65).

⁷⁰ Ibid, 227.

the psychological response triggered by external factors and depended on the social interaction. To be ashamed is to feel guilt or embarrassed, because of your failure to compromise with the accustomed rules of your social environment; the cost of your personal value is estimated according to your social attitude. However, this reaction is not enough to preserve you from doing harm to the others; Protagoras needs to introduce the notion of *dike*, as the supplementary disposition to *aidos*. *Dike* is manifested as a form of empathy to people who are in a painful state or as anger to those who act unjustly. Both of these basic emotions, *aidos* and *dike*, combined with the appropriate education, establish the internal law in the individual soul.

In the case of Democritus *aidos* has a completely different *terminus a quo*, which is based on the physiology and the rational ability of human soul. In addition, this emotional response is the outcome of the refinement of soul-atoms through the process of deliberation and experience. I must stress that the character of this process is mental - mentality for Democritus is also constructed by atoms and void- and mainly cognitive. Human beings learn to be moral not only because of their interaction with the external environment, but also because of their inner tendency to choose what is best, which is similar to what is advantageous for them.

The natural tendency towards advantage is linked to the avoidance of big disturbances of the human soul, caused by the uncritical acquiescence to every desire. Democritus considers the advantageous life equal to pleasant life and adds: “the boundary (?πος) of what is advantageous and disadvantageous is enjoyment and lack of enjoyment

(τέρψις καὶ ῥτερπή, DK 74).”⁷¹ But this discrimination of the deleterious and the beneficial choice reveals on the one hand the potentiality to access to what is *truly* advantageous, and on the other hides the objective character of the moral truth.

Therefore, shame for Democritus accounts for the internal law, which is related to a cognitive and intellectual process, and contributes to the refinement of soul atoms; simultaneously, the opposite procedure takes place: as much as atoms’ quality become finer, the more self-sanction, intelligence and temperance is fortified.

According to this approach, the role of *aidos* seems more superior in Democritus’ system than in Protagoras, since it is conceived primarily as self-respect and personal virtue. This kind of virtue does not praise the political excellence and is not based on social interaction⁷² but rather it implies the active, moral behaviour derived from what is duty (*deon*). The definition of *aidos* as self-authority stresses the importance of autonomy in relation to heteronomy.

Let me now explain the relation of *aidos* with autonomy and its significance to the well-ordered status of life. In B41, B42 and B43 Democritus praises the value of shame and describes its power: shame is self-sanction derived from duty, duty is the greatest manifestation of human life, and repentance of shameful actions can be the “salvation of life”. Of course the connotation of salvation does not promise a *post mortem*, better life in heavens, but stresses Democritus’ faith in humanness; people become secure and just

⁷¹There is much debate for the translation of the word ῥπος among the scholars. I agree with Annas’ suggestion that Democritus with this term wants to discriminate among the pleasures rather than defining the state of cheerfulness. Annas, 2002, p.176.

⁷² *ibid*, p.

because of the reform of themselves, and not because they reconsider or depend on external law-conventions, like the claim advocated by the Sophists.⁷³ The law is inside them and gives an intrinsic value to human character⁷⁴.

The importance of the internal law in human character becomes quite clear, if we take into consideration step by step Democritus' conception about human progress, starting from the primordial stage described in Diodorus Siculus, till the potential end⁷⁵ that Democritus called "eudaimonia".⁷⁶ In contrast with Aristotle, who defines eudaimonia as the end of the society, or Protagoras, who claims that human contentment is based on social interaction, Democritus considers happiness primarily as a personal achievement and it is the personal aim, a stable⁷⁷ state, which depends on individual's power, motivated by the personal interest of the individual and not by fear⁷⁸. In case of Democritus fear and distress is related to the existence of some kind of injustice, while *eudaimonia* has a direct connection with justice and freedom:

"The cheerful man, who is impelled towards works that are just and lawful, rejoices by day and by night, and is strong and free from care. But the man who neglects justice, and

⁷³ I have in mind Antiphon and not Protagoras. As I suggest at the second half of this chapter Protagoras understands justice as the inner, social emotion.

⁷⁴ "The good is not just to abstain from injustice, but not even to think of it" (B 62).

⁷⁵ Summarizing Democritus' view about human progress, we can discern three phases: a) the "bestial" stage: human soul is full of fear and the quality of its atoms is poor. The first men lived disorderly b) the social phase (humanness): people still feel fear but they have developed also social emotions. Their experience and interaction improved their soul atoms. During this phase they established political order, they have heteronomy and c) the ideal phase: people would live in a fearless state and their organic condition would be excellent. They would feel strong and well ordered individually and politically. The ultimate state is identical to autonomy and *eudaimonia*.

⁷⁶ *eudaimonia* includes both cheerfulness and welfare.

⁷⁷ The stability of this state is explained by Democritus' view about the access to knowledge. Human beings can understand the laws of reality through the refinement of their intellectual atoms even if they cannot grasp this reality through senses.

⁷⁸ Fear depends on external factors, on others' reaction.

does not do what he ought, finds all such things disagreeable when he remembers any of them, and he is afraid and torments himself.” DK 174.

Therefore, everyone who commits crimes or is apt to injustice is considered as threat of the personal interest and he must be punished without exception (B259, B260). The punishment of a criminal is self-defence and self-duty (B256); although it seems that this hides the value of mutual retribution, Democritus makes it explicit that injustice causes disturbance in the individual soul and disorder to the ordered social state (B258)⁷⁹.

Democritus’ anthropological and moral system seems well established in his theory of physics. In opposition to Plato, he praises the freedom of the individual within the framework of excellence of the material soul⁸⁰ and his moral theory is able to resist to Plato’s argument that the moral dictates must derive from the highest authority and that social convention implies always the relativism in values. Although this criticism appeals to Protagoras, Democritus offers the safe ground of atomism for his faith that the highest authority is the power of human nature.

3.2. Protagoras’ morality as social virtue

The most famous thesis by Protagoras is presented in the *Theaetetus*, the *homo*

⁷⁹ Protagoras also states, at the end of the myth of Prometheus, that everyone who does not obey the law is condemned to death because he disturbs the social order but his faith in justice focuses on what *nomos* defines and not on the personal duty. Plato presents Protagoras to say that even if someone does not feel just he must pretend to be just. (327c) I doubt that this is an original view of historical Protagoras but probably Plato wants to stress that the conventions fail to establish justice in the individual soul.

mensura thesis. This claim, which is transmitted by Plato, is often interpreted as the main statement of Protagoras' subjectivism and relativism. However, Plato had his own reasons to present Protagoras as the unstable character who was inappropriate for teaching *arete* to young people. Thus, in the eponymous dialogue, Protagoras is challenged by Socrates to define what he teaches: "I teach prudence (εἰσβολία) in private business, how one may best manage one's domestic concerns, and, as regards civic affairs, he teaches how to excel in speech and action" (318e-319a). Socrates adds that Protagoras is the teacher of political art and makes the students good citizens.

According to the previous definition of sophistry, Protagoras considers the political art similar to prudence and consequently assimilates the good citizen with the well-ordered man. As we have seen in the first chapter, prudence is the synthesis of *logos* and *anchinoia*. The first men in the account of prehistory of Diodorus Siculus have the natural charisma of mind's readiness. In the case of *Protagoras*' myth it is Prometheus who symbolizes the forethought. In addition both Protagoras and Democritus stress that this readiness of mind serves the personal interest of the agent. However, the emphasis given by Democritus is on the activities of the rational soul (1.8), while Protagoras focuses on the notion of *aidos* and *dike*.

Let me first explain the relation of prudence with self-interest and then distinguish the difference on which Protagoras and Democritus establish their conception about morality. In this way, I will finally argue that Protagoras serves the best possible scenario of human perspective regarding the establishment of morality in the society. Prudence is

⁸⁰Farrar, 1988, 245

the rational ability of deliberating the best choice in each case. As Aristotle defines it in the *Nichomachean Ethics* (1142b) it is the mental process, which infers the good judgement of the noble decision. Thus, if *euboulia* aims to what is best for us, then our self-interest is identical to what is noble.

In the case of Democritus what is advantageous was based on the atomic structure of the intellect. The refinement of soul atoms was capable to grasp the wise order of reality; and this is also clear in Democritus' theorizing of the establishment of morality. People started gathering and interacted because of fear and then, mainly based on the experience and their rational abilities, they found justice.

Although that the myth in the Protagoras has many similarities with the prehistory in Diodorus, the ordered society is not established because of the rational abilities of human beings and this is an indication that humanness was not considered in the myth as the product of the intellect. Protagoras refers clearly to the weakness of reason to establish morality on its own; for this reason, the first people were endowed by nature with two fundamental emotions, *aidos* and *dike*. They need an innate disposition to follow their rational deliberation: the sense of justice and shame (*dike* and *aidos*). This innate disposition, distributed equally to all the first men, implies the universality of justice: people are all, potentially, just and this is something that Democritus misses to stress or his conception of morality based on physics does not require to stress.

The equal and universal character of justice starts from Protagoras' faith that people need to cooperate. They need to be capable to gain an accurate and deep intuitive understanding of their fellowships in order to understand themselves and become well-

ordered. Thus, humanness for Protagoras takes place when people start to interact essentially socially⁸¹. In addition Protagoras implies that the bonds, developed among the people, secure the contentment of human existence. In opposition to Democritus who defends that the fulfilment of the human soul depends on individual's efforts, Protagoras claims that the participation to social activities and the education from the social environment is the best teacher for the personal excellence. People acquire the ability to do something successfully or efficiently because of their interaction in the Assembly, because of their equal access to education.

Thus, *arete* becomes feasible, because it is defined as social virtue. In this sense Protagoras does not deny that there are some men more talented by nature (326c) but rather that their duty is to contribute to polis. In this way, their contribution is beneficial for two reasons; it provides the best available knowledge to the less competent persons and actively encourages the esteem for culture in society. The encouragement for knowledge and culture are not restricted to the personal sphere of the individual, as in Democritus theorizing of personal improvement, because the educative process is not kept in the bounds of the individual power; it is a dynamic course between the individual and the society, which aims to transform the person into a noble citizen.

In addition, the enhancement of general education broadens the possibilities for improvement of all the social fields. According to this option, the flourishing affects most of the factors that conduce in the welfare of the majority of the people. This is the shortest route towards financial and scientific progress.

⁸¹ It seems that Protagoras has the same view with Aristotle that man is a social animal. However,

For the sake of the debate one possible objection might be raised towards Protagoras' defence of the social perspective of human nature and it is based on the individual freedom. In Democritus conception of individualism, people appear to choose for their improvement or their decay. On the other hand, Protagoras' intention is not to emphasize to the individuality but rather argues in favour of the common, the social benefit. Therefore, it might be argued that he does not take into serious consideration the role of the individual in society. However, Protagoras serves his own interests by being a well-paid sophist, while defending that the character of the democratic polis is capable of absorbing the financial and social inequalities through the social interaction. Hence, according to Protagoras, the political conditions in the democratic environment allows for assimilating the individual to the social interest⁸².

Protagoras does not share the teleological aspect that Aristotle holds for the *polis*.

⁸² Farrar, 1988, 94.

4. Conclusion

In this closing chapter I briefly review the main arguments and conclusions of my thesis. In order to explore the ideas of naturalism, conveyed by Democritus and Protagoras, I investigated the following aspects:

- a) The account of prehistory in Diodorus Siculus as an evidence for Democritus' original views of anthropology
- b) The myth of Prometheus in the *Protagoras* as a link to Democritus' anthropology. I argued in favour of the connection between the myth in the *Protagoras* and the prehistory in Diodorus Siculus in favour of an early evolutionary theory.
- c) The possible interpretations of the myth by Beresford, Vlastos, Theiler
- d) I offered my own argument against Vlastos' and Theiler's thesis for the teleological interpretation of the myth in the *Protagoras*, drawing evidence from the myth in Plato's *Statesman*
- e) After identifying that Democritus and Protagoras were proponents of the same naturalistic tradition I offered an account of their differences in morality.

a) I tried to show that the Prehistory in Diodorus Siculus transmits the original views of a lost treatise by Democritus about cosmology and the human progress. I tried to support this thesis by drawing evidence from his physical and his ethical theory. In this way, I concluded that Democritus' naturalism come across in continuity with his philosophical thought, and I argued for Vlastos' and Beresford's thesis that the prehistory follows a genetic theory of progress. This conclusion became the basis on which I built my arguments for the following chapters of my thesis.

b) In the second chapter I argued that the myth in Plato's *Protagoras*, serves as an allegorical version of the account of prehistory in Diodorus Siculus, as Beresford and Osborne claim. Thus, I stressed the similarities in both works and argued for an early account of evolutionary theory in the *Protagoras* based on Protagoras' agnosticism, the common vocabulary in both stories and their close relationship. Of particular importance of my arguments for the biological theory was the refutation of the theory of social contract theory, located in the myth by Nicholas Denyer. My main arguments against Denyer were a) that Protagoras has political reasons to believe that social morality is a natural disposition, which grows with the political interaction and that a well ordered state cannot be the result of coercion or of mere self-interest and b) I found no evidence in the text of a strong antithesis between law and nature.

c) Then, I presented the teleological interpretations of the myth in the *Protagoras*. Vlastos on the one hand suggested that the myth might be read as the description in Herodotus' history, which praises nature or God's providence. But this claim is weak because Herodotus just refers to the economy of species without giving an argument for

the origins of living beings or the first society. On the other hand, Theiler advocated that Plato's *Protagoras* stresses the affinity with Gods and brings evidence from the *Timaeus*, but his argument is also weak because 1) the *Timaeus* does not refer to the political society and 2) Plato did not have reasons to present the myth in the *Protagoras* expressing his own views. For the second part of my argument I examined another dialogue, the *Statesman*

d) I employed the myth in the *Statesman* as a foil to Protagoras' myth. I argued that Plato had political and philosophical reasons to present a naturalistic account in the *Protagoras* and to give an answer to the proponents of naturalism in the *Statesman*. The similarities in both dialogues reveal the correspondence of both dialogues. This correspondence was my key point to argue that Plato did not present Protagoras to support a teleological view, because he claims clearly in the *Statesman* that the era of myth in the *Protagoras* reflects the decay of human beings in a godless world. Furthermore he asserts that people were living before in welfare under God's authority. This thesis was my challenge to proceed to my defence of naturalistic ethics in the last chapter.

e) In the last chapter of my thesis I first presented Democritus' moral doctrines based on Vlastos and Farrar's suggestions. I argued that the human progress seen by Democritus is based on his theory on physics. My main stress was into the interaction between body and soul and the improvement of the human character. I also support my thesis with various fragments from ethics and physics and gave emphasis to the notion of *aidos* as self-sanction. I argued that according to Democritus the human progress is a free

choice but simultaneously based on the stable ground of atomism. The importance of the self-rule as an inner, active force led me to the conclusion that Democritus' believed in the individual's power to find personal happiness. According to Democritus, justice is first established in the human soul and then in the society. The laws serve an educational role and the possibility of an ideal state, in which all the citizens will be self-ruled might infer that Democritus believed in the state of absolute self-control, a state of political anarchy.

In contrast, Protagoras defends that personal and social happiness is identified with interaction. In the last part of this chapter I claimed that Protagoras' safe ground for morality is the sense of fairness (*aidos* and *dike*) and the equal access to the political education. Thus, I argued that Protagoras suggests that moral principles based on natural and social factors do not necessarily imply corruption or selfish motivations as Plato indicates in the *Gorgias* and in the *Republic*. Neither the argument in the *Statesman* stands for refuting the power of social interaction; Protagoras rejects an ethical instruction based on stable principles as Mathematics or on Forms or on the commands of some absolute authority such as the Demiurge of the universe. His moral doctrine is compatible with his political view of democracy, which allows the access of all citizens to moral and social progress without disrespecting the right in diversity. Personal and social morality can be achieved in different ways within the framework of regarding social opportunities equally. This perspective permits us to define our moral interest not because of our self-seeking nature, but due to our universal human nature: as a result this implies our improvement as a totality.

In this respect Humanity can be the Measure of Cosmos.

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