THE THEORETICAL UNDERPINNINGS OF ARISTOTLE'S PRACTICAL PHILOSOPHY

By

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I hereby declare that this dissertation contains no materials accepted for any other degrees in any other institutions.

I also declare that the thesis presented here contains no material previously written and/or published by another person, except where appropriate acknowledgement has been made in the form of bibliographic reference.

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Abstract

This dissertation argues that when Aristotle constructs his arguments in his ethics (political science more broadly), he sometimes, though not always, appeals to concepts, principles or accounts of his metaphysics, physics, and psychology and thus, his practical philosophy is dependent on his theoretical philosophy to a considerable degree.

In chapter 1, I examine *EN* vii 1.1145b2-7, a methodological statement that has widely been taken as the clearest announcement and application of dialectical methodology. I challenge the received interpretation of *EN* vii 1 and argue for a deflationary and non-dialectical account which conforms with Aristotle's scientifically oriented general methodology. I argue that Aristotle's practical philosophy follows a scientific method as employed in other scientific treatises which argue from facts and observations rather than *endoxa*, i.e., reputable opinions, as such.

In chapter 2, I argue that the *ergon*, i.e., the function, of human beings in the *ergon* argument at *EN* i 7 must be construed against a teleological framework of Aristotelian natural science. I show that the concept of *ergon* is used in the same sense as it has been argued for in extra-ethical treatises. I argue that this reading does not entail the following two claims: First, human beings are not analogous to artificial tools or bodily parts in terms of their *ergon*. Second, natural teleology that operates strictly in the case of other living beings does not determine human beings in the same way. Human beings require certain internal and external enabling conditions to complete their form.

In chapter 3, I turn to the *Protrepticus* an early text devoted to making exhortations to do philosophy. I argue for the following claims: First, Aristotle coherently defends the view that while theoretical knowledge is intrinsically valuable and choiceworthy as an end in itself, it has some accidental utility in practical life.

Second, Aristotle considers theoretical knowledge of the human end, the human soul, and its parts as a requirement for the good person or politician to perform fine actions and lay down good laws. Third, the theoretical knowledge required for the good person or politician has to be construed in a non-minimalist sense, that is, it cannot be gained by mere observation or experience but rather by doing philosophy to some extent. Fourth, the non-minimalist requirement of theoretical knowledge for the good person or politician is retained in Aristotle's later, more mature treatises.

In chapter 4, I take up a vexing question in Aristotle's political science. Aristotle believes that some people can be enslaved without injustice on the basis of their nature. The question of how we should understand the nature Aristotle ascribes to the natural slave is a matter of contention. I argue that the natural slave is a legitimate human being who nevertheless has an ineliminable rational deficiency. Moreover, because natural slaves share the same defining *ergon* with the rest of human beings, Aristotle's theory of human nature that grounds his political science is not inconsistent.

Abbreviations

Aristotle's and Others' Works

Airs	De Aere Aquis et Locis (On Airs, Waters, and Places) [Hippocrates]
Antid	Antidosis [Isocrates]
APo	Analytica Posteriora (Posterior Analytics)
APr	Analytica Priora (Prior Analytics)
Cael	De Caelo (On the Heavens)
Cat	Categoriae (Categories)
Charm	Charmides [Plato]
Cra	Cratylus [Plato]
DA	De Anima (On the Soul)
Div Somn	De Divinatione per Somnum (On Divination by Dreams)
EE	Ethica Eudemia (Eudemian Ethics)
EN	Ethica Nicomachea (Nicomachean Ethics)
GA	De Generatione Animalium (Generation of Animals)
GC	De Generatione et Corruptione (On Generation and Destruction)
Grg	Gorgias [Plato]
HA	Historia Animalium (History of Animals)
IA	De Insessu Animalium (Progression of Animals)
Insomn	De Insomniis (On Dreams)
Somn	De Somno et Vigilia (On Sleep and Waking)
MA	De Motu Animalium (On Animal Motion)
Metaph	Metaphysica (Metaphysics)
Mete	Meteorologica (Meteorology)
MM	Magna Moralia

Mu	De Mundo
Oec	Oeconomica (Economics)
Panath.	Panathenaicus [Isocrates]
PA	De Partibus Animalium (On the Parts of Animals)
Phys	Physica (Physics)
Phdr	Phaedrus [Plato]
Phlb	Philebus [Plato]
Poet	De Poetica (Poetics)
Pol	Politica (Politics)
Pr	Problemata (Problems)
Protr	Protrepticus
Rep	Respublica [Plato]
Resp	De Respiratione (On Respiration)
Rhet	Rhetorica (Rhetoric)
SE	De Sophisticis Elenchis (On Sophistical Refutations)
Sens	De Sensu et Sensibilibus (On Sense and Sensibilia)
Tim	Timaeus [Plato]

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1. Introduction

In his ethics (and political science more broadly)[1] Aristotle often appeals to certain concepts, claims or accounts concerning human nature, soul, and activity whose counterparts are argued for and discussed in his metaphysics, physics, and psychology. That's why Aristotelian scholars usually consult Aristotle's texts from his theoretical philosophy when they try to illuminate and form an opinion about his ethical and political claims. For instance, in order to show in what ways Aristotle's concept of *ergon* (function) in the *ergon* argument in the *Nicomachean Ethics* (*EN*) diverges from Plato's argument in the *Republic*, recently Barney 2008 has appealed to Aristotle's teleological natural science and metaphysics (298-302). In a similar way, Achtenberg 2002 has drawn on metaphysics to elucidate Aristotle's concepts of *telos* (end or goal) and *energeia* (activity), which appear in fundamental claims in Aristotle's ethics and politics (61ff.). Although commentators commonly resort to Aristotle's theoretical philosophy to supplement their interpretation and understanding of his claims in his practical texts, they sometimes deny that those accounts actually have a bearing on Aristotle's arguments.[2] Hence, whether the claims and arguments in practical philosophy require for their justification or explanation an appeal to extra-

[1] At *EN* 1094b7-12 Aristotle describes the inquiry in the *Nicomachean Ethics* as a sort of political inquiry: "While it is satisfactory to acquire and preserve the good even for an individual, it is finer and more divine to acquire and preserve it for a people and for cities. And so, since our line of inquiry seeks these [goods, for an individual and for a community], it is a sort of political science" (tr. Irwin). In *EN* 1181b14 Aristotle calls ethics and politics *hê peri ta anthrôpina philosophia* meaning that the subject of this discipline is man and certain properties of man. See Frede 2019 for an illuminating discussion concerning the role Aristotle ascribes to what she calls "the philosophy of human affairs."

[2] See e.g., Bolton 2020, for a recent attempt to benefit from Aristotle's scientific texts to illuminate a discussion concerning *phroêsis* in ethics. At the same time, he also writes that "we should not use it [the text from the *Metaphysics*], or related texts in other scientific works, to interpret what we find in the *EN*. But we still may use it and related texts in other scientific works to understand Aristotle's own views as a natural scientist on the nature of memory and experience (*empeiria*) for properly limited assistance concerning his views on the issues that concern us here" (238).

ethical treatises is far from clear and still disputed.[3] This thesis discusses the relation between Aristotle's practical and theoretical philosophies. It argues that when Aristotle constructs his arguments in his political science, he sometimes, though not always, appeals to concepts, principles or accounts of his metaphysics, physics, and psychology and thus, his practical philosophy is dependent on his theoretical philosophy to a considerable degree.

This thesis is about the theoretical side of Aristotle's ethics rather than its practical side. By this what I mean is that it is not going to investigate, for instance, questions regarding action, practical wisdom and deliberation, the role of ethical generalizations in providing action guidance, Aristotle's understanding of practical decision making and so on. It is rather concerned with first, the methods and practices Aristotle employs in ethical inquiry to arrive at the accounts of the subject matter he is investigating, second, whether any physical, psychological, or metaphysical concepts, principles, or accounts figure in Aristotle's practical inquiry, and third, what degree of familiarity with theoretical philosophy is presupposed in Aristotle's accounts. Thus considered, the main thrust of this thesis is to explore the methods, practices, concepts, principles, and claims that Aristotle borrows from his theoretical philosophy in his ethical and political discussions.

More specifically I defend the following theses which give rise to four mutually supporting and interlocking essays in four chapters to be elaborated subsequently:

(i) In his ethics, Aristotle employs a scientific method of inquiry as outlined in the *Posterior Analytics* rather than a form of dialectical method. The correct interpretation of *EN* vii 1.1145b2-7, which has widely been taken as the clearest

[3] Irwin 1978, 1980, 1988; Whiting 1988; Bostock 2000; Shields 2015 and Leunissen 2015 have argued that Aristotle appeals to his theoretical philosophy to justify his accounts in ethics. Achtenberg 2002; Johnson 2015; Scott 2015 have argued for an explanatory dependence on extra-ethical theories. Gomez-Lobo 1989, McDowell 1980, 1995a, 1995b 1998; Roche 1988; Klein 1988; Barney 2008; Polansky 2014, 2017; Karbowski 2019; Kraut 2022 have claimed that Aristotle's practical philosophy is entirely autonomous from his theoretical philosophy. Cf. Salmieri 2009, 334, n.25.

announcement, endorsement, and application of the dialectical method is in fact compatible with a scientific methodology.

(ii) The *ergon* of human beings in the *ergon* argument at *EN* i 7 must be construed against a teleological framework of Aristotelian natural science. Nevertheless, this reading does not entail the following two claims: The fact that human beings have an *ergon* does not suggest that they are for the sake of a larger whole in analogy with their organic parts. Human beings are not designed or created by a further nature to have a specific purpose so that their life could have a point or meaning only in the context of a larger whole. Second, natural teleology does not determine human beings as strictly as it does other living beings. To achieve their *ergon* fully and become happy, human beings require certain internal and external enabling conditions.

(iii) The student of political science (including ethics) is expected to possess sufficiently broad theoretical knowledge of the human end, soul, and its parts. A rudimentary grasp of biology, psychology or other natural sciences is not sufficient for them to be successful in their actions and political endeavors such as laying down good laws for the sake of a good life in the state.

(iv) Although natural slaves are considered legitimate human beings, they are denied participation in political activity and good life on the basis of their alleged defective nature. However, natural slaves share the same defining *ergon* with the rest of human beings, therefore, Aristotle's theory of human nature that grounds his political science is not inconsistent. Moreover, Aristotle draws political conclusions about natural slaves by using teleological principles. Hence, a teleological framework underlies Aristotle's account of natural slavery.

Before I present the argument that demonstrates these conclusions and justifies the construction of this thesis on the basis of these considerations, we need some introductory remarks about Aristotle's understanding of science and its branches. This

will allow us first, to place the subject matter of this thesis in the broader framework of Aristotle's philosophy and second, to see what gives rise to the main question of this thesis which concerns the link between Aristotle's theoretical and practical philosophy.

1.1. Division of the sciences

Aristotle often classifies the bodies of knowledge that he calls 'sciences' (*epistêmai*) into three kinds: practical, productive, and theoretical (*Meta*. 1025b25: *πρακτικὴ, ποιητικὴ, θεωρητική*).[4] Dividing the intellectual landscape into classes seems to be based on two major concerns, namely, the 'objects' and the 'ends' of the sciences. He thinks that "every intellectual discipline (*dianoêtikê epistêmê*) …is concerned with causes and principles" (*Meta*. 1025b6-7) and "every science seeks certain principles and causes for each of its objects—e.g., medicine and gymnastics and each of the other sciences, whether productive or mathematical. For each of these marks off a certain class of things for itself and busies itself about this as about something that exists and is (*Meta*. 1063b36-1064a4).[5] Regarding the ends of different classes of sciences, Aristotle tells us that the end of theoretical sciences is knowledge and truth while the practical and productive sciences have a further end, namely, action and product respectively.[6]

A further distinction worth stressing in this context is Aristotle's division of the bodies of knowledge that he refers to as theoretical sciences into types: "There must be three theoretical philosophies, mathematics, natural science, and theology" (*Meta*.

[4] 'Science' is often used to render '*epistêmê*' which has two related senses. An *epistêmê* is an organized body of knowledge like biology or geometry. But it also denotes the cognitive state of someone who has mastered a certain body of knowledge. In particular for the latter sense of *epistêmê* scholars have offered different translations than 'science'. Bronstein 2016: 'scientific knowledge,' Lesher 2001: 'expert knowledge,' Burnyeat 2011: 'understanding.' Note that in contrast to the assumptions of modern science, Aristotle's *epistêmê* allows disciplines such as ethics or metaphysics to be considered 'sciences' as well.

[5] For the objects of natural, practical, and productive sciences see *Meta*. 1025b18-21, For the objects of natural, and mathematical sciences and theology see *Meta.* 1025b19ff. and *Meta.* 1073a23ff.

[6] See *EN* 1095a5; 1179b1; *EE* 1216b21–25; *Meta*. 993b19–21; cf. *EN* 1103b26–29; *MA* 701a8–13.

1026a18-19).[7] Aristotle also sees a certain hierarchy between sciences. Regarding the theoretical ones he writes that "it is obvious that if the divine is present anywhere, it is present in things of this kind. And the highest science must deal with the highest genus, so that the theoretical sciences are superior to the other sciences and theology to the other theoretical sciences" (*Meta*. 1026a19–23). While theoretical sciences are said to be superordinate to other sciences on the basis of their genera, theology is ranked over mathematics and natural science. Theoretical sciences are more general and concerned with principles and causes that govern the principles and causes of other sciences. Also, theoretical sciences are more final and intrinsically more valuable than practical and productive sciences. They are pursued for the sake of knowledge alone.

On the other hand, Aristotle takes theology to be superior to other theoretical sciences and in particular to natural sciences because the latter are concerned with objects whose knowledge holds only for the most part despite being necessary and universal in some sense. In the *Nicomachean Ethics* vi 3 he tells us that "What is known systematically…is by necessity. Therefore, it is eternal, since everything that is by necessity, without qualification, is eternal, and what is eternal is subject neither to coming into being nor to passing out of being" (*EN* 1139b22-24). He means that to call a body of knowledge science in the proper or strict sense, it should deal with eternal, necessary and exceptionless facts about universals that do not admit of being otherwise. He then refers to the *Posterior Analytics* (*EN* 1139b27) discussion on this issue to confirm his conviction. According to those rigid standards that are more comprehensively laid out in the *Analytics* only the strictly theoretical sciences are to be counted as sciences in the exact sense (*APo* 71b15-16: *epistêmê haplôs*). Hence since theoretical sciences such as physics and biology are concerned with things the

[7] Note that although Aristotle often refers to mathematics and physics as sciences (*epistêmai*) (For 'mathematical sciences': *APo* 71a3; 79a18; *Cael* 303a21; for 'natural science': *PA* 640a2; 641a35; *Meta* 1025b19), in this passage he refers to three theoretical philosophies (1026a18-19: τρεῖς ἂν εἶεν φιλοσοφίαι θεωρητικαί). One can argue that for Aristotle science (*epistêmê*) and philosophy are not two distinct approaches to truth and reality after all.

knowledge of which holds only for the most part they are considered inferior to theology (and astronomy) which deal with eternal and exceptionless things.

However, we must not overlook the fact that Aristotle also uses the term *epistêmê* in a broad sense for any branch of learning. Apart from paradigm sciences, Aristotle persistently refers to various branches of knowledge including optics and even gymnastics as we quoted above (*Meta*. 1063b37) as *epistêmê*.[8] In the same way, in the *Nicomachean Ethics* i 1 he identifies medicine, shipbuilding, household management and so on as science. And his investigation of the 'science or capacity' that is concerned with the chief human good ends with identifying the science of politics[9] as the most authoritative and master science (*EN* 1094a1-a17).[10]

1.2. The autonomy of the sciences

In a very short chapter in the *Posterior Analytics* book 1 Aristotle makes some statements that have been taken to be the announcement and endorsement of what has been called by scholars as 'the doctrine of the autonomy of sciences'. In one of the key passages in that chapter, Aristotle says:

> Each demonstrative science restricts its concern to three things: the entities whose existence it posits (*tithenai*) which fix the kind (*genos*) whose proper attributes it is its job to study; also, the so-called common axioms which are

[8] In the *Cat*. 10b3-4 he considers boxing and wrestling as sciences. See also *APo* 76a5-25 where he talks about *epistêmai* such as geometry, arithmetic, mechanics, harmonics, and optics.

[9] Identifying the body of knowledge that is concerned with the 'virtues and vices' of the soul as *epistêmê* is as early as the *Protrepticus* in Aristotle. He clearly defines the discipline of philosophy concerned with the virtues of the soul as *epistêmê* several times in *Protrepticus* vi (37, 26-38, 8, 39, 10). Although he doesn't use the terms of practical philosophy or knowledge there, he still denotes that branch of knowledge as *epistêmê*. See also *Rhet*. 1359b17.

[10] It is worth noting that according to *Meta*. i 2 "the science that investigates the first principles and causes" namely, metaphysics is the most overarching of the sciences (*archikôtatê de tôn epistêmôn*) (*Meta*. 982b2ff.) So, we must understand political science to be the most architectonic *practical* science because the politician is responsible for deciding which sciences will be studied in the state and to what degree.

> primary basis for demonstrations; and thirdly the [proper] attributes [of the genos], of which it grasps what each signifies. (*APo* i 7.76b11-16, tr. Bolton 2010)

On the basis of this and similar passages scholars have argued that Aristotle is committed to the departmentalization of knowledge into different domains each having its own *genos* and principles. It has been widely held that this doctrine is Aristotle's reaction to Plato's dialectic which unifies all special sciences.[11] Admittedly Plato's form of the Good as the fundamental metaphysical principle causally explained all the other *genera* of the sciences and united all the bodies of knowledge together.[12] Aristotle rejection of a single science or 'theory of everything' led him to the departmentalization of special branches of sciences with their specific objects and principles. Bolton, for instance, claims that from the three items counted in the above passage only common axioms such as the principle of non-contradiction figures in more than one science. He has argued that there is no room, for instance, for substantial material of metaphysics or biology to figure in other sciences in Aristotle (2010, 31).[13]

Kraut makes a similar observation about ethical theory in the following way when he comments on Aristotle's function argument:

> Even though Aristotle's ethical theory sometimes relies on philosophical distinctions that are more fully developed in his other works, he never proposes that students of ethics need to engage in a specialized study of the natural

[11] See Ferejohn 2013, 65, n6: "This shift is perhaps motivated by Aristotle's general anti-Platonism and more particularly by his rejection of the Platonic conception of a unified science that ranges over every possible sort of being without exception." See also Owen 1966/1986.

[12] See *Republic* 511b2–c2: "It [dialectic] does not consider these hypotheses as first principles but truly as hypotheses—but as stepping stones to take off from, enabling it to reach the unhypothetical first principle of everything. Having grasped this principle, it reverses itself and, keeping hold of what follows from it, comes down to a conclusion without making use of anything visible at all, but only of forms themselves, moving on from forms to forms, and ending in forms." (tr. by Grube and rev. by Reeve)

[13] For similar views concerning the autonomy of sciences see McKirahan 1992, 50; Owen 1966/1986, 141/213; Johnson 2009, 335; Lennox 2010b, esp. 5f. and 10–12.

> world, or mathematics, or eternal and changing objects. His project is to make ethics an autonomous field, and to show why a full understanding of what is good does not require expertise in any other field. (Kraut 2022, 5)

Kraut thinks that owing to Aristotle's commitment to the idea of the autonomy of sciences, there is a gap between his ethical theory and other theoretical sciences such as physics or metaphysics. Since there is such a gap, Aristotle does not expect his audience to engage in any specialized study of the objects of extra-ethical fields, either.[14] Kraut also points out that Aristotle's goal is to depart from Platonic philosophy that considers "all branches of knowledge as a unified whole" (ibid., 5).

Barney has expressed similar concerns about the autonomy principle in relation to Aristotle's ethics in a frequently cited paper on the function argument.[15] With regard to the biological reading of the function argument in *EN* i 7, Barney asserts that "Though fair enough as a presentation of general Aristotelian doctrine, such readings operate at an unsatisfying remove from the text of the *Ethics*: this line of argument cannot be one that Aristotle expects his readers to extract from the reasoning he presents. And it threatens to wreck the reasoning he *does* present" (2008, 302, emphasis original). She thinks that while the correct interpretation of the function argument should introduce nothing incompatible with Aristotle's metaphysical or physical theories, nevertheless, these theories should not figure in its interpretation (ibid., 303).

This view of the relationship between Aristotle's practical and theoretical philosophies is indeed an influential one that has been advocated by numerous scholars of Aristotle. The so-called doctrine of the autonomy of the sciences has usually been invoked to attest to the alleged independence of Aristotle's ethical claims and accounts from his metaphysical, psychological, or physical theories. However, as

[14] Karbowski 2012, 326, n.10. reports that "Ron Polansky has suggested to me that Aristotle may actually allow autonomous disciplines to reach inconsistent conclusions because in *Pol*. i 8 he argues that animals are for the sake of humans, a conclusion that contradicts the non-anthropocentric slant of his natural philosophy."

[15] See esp. Barney 2008, 303, n. 23 where she more explicitly mentions 'the autonomy of the sciences'.

some scholars have already pointed out, the idea of departmentalization of the sciences as outlined in the *APo* i 7 needs to be understood in a more flexible way than has often been taken.[16] It is right that Aristotle cautions against a kind of scientific unity and the transfer of principles from one science to another. Nevertheless, he immediately qualifies this admonition as is seen at the end of the passage below:

> The items from which the demonstrations proceed may be the same; but where the kinds are different, as with arithmetic and geometry, you cannot attach arithmetical demonstrations to what is incidental to magnitudes unless magnitudes are numbers. *But I shall explain later how in some cases this is possible.* (*APo*. i 7.75b2–6, tr. Barnes, my emphasis)

According to this passage what Aristotle in fact rules out in terms of transfer of principles is that one should not attempt to demonstrate theorems by using principles from another science. However, note that he also adds that this norm does not apply to every case. We find out later at *APo* i 13 that where two sciences fall under one another this rule does not obtain. For example, while one should not prove theorems in geometry by using arithmetical principles, this is permissible in optics given that optics is subordinate to geometry as a science (*APo* 78b34-79a13).[17]

The main idea of this thesis emerges as a reaction to the interpretations that separate Aristotle's practical philosophy from his theoretical philosophy on account

[16] See e.g., Karbowski 2012, 323-326; Johnson 2015, esp. 175-178; Leunissen 2015 *passim*.

[17] He describes some exceptional cases of his prohibition of transferring principles at *APo* i 13.78b34-79a13: optics-geometry; mechanics-solid geometry; harmonics-arithmetic; star gazing-astronomy. Judson 2019 also notes that there is a second type of exception, "the one exemplified, according to Aristotle, by the sciences of geometry and medicine in dealing with the fact that circular wounds heal more slowly than non-circular ones" (178-179). Judson indicates that some scholars admit only these two exceptional cases to the autonomy principle whereas he himself denies it altogether. He argues that outside the *Posterior Analytics* Aristotle is not committed to the view that knowledge is divided into watertight compartments, determined by their distinct genera, and what goes on in one compartment cannot turn up in another (179). He thinks that in practice Aristotle's science and philosophy is indeed 'messy' and 'unsystematic' in terms of the 'borrowing' and 'sharing.' (201).

of some strict understanding of the doctrine of the autonomy of sciences.[18] It regards the claims and arguments of scholars such as Kraut, Barney and many others with respect to the theoretical underpinnings of Aristotle's ethics with suspicion. It argues that when Aristotle constructs his arguments in his ethical and political theory, he sometimes, though not always, appeals to concepts, principles or accounts of his metaphysics, physics and psychology and thus, his political science is dependent on his theoretical philosophy to a considerable degree.

1.3. The argument

My argument will be along four supplementary lines each of which is taken up in an essay in the individual chapters. In this section, I will provide the argument for each step in broad terms and in the next section on the synopsis of chapters I will highlight some details of the arguments in their specific contexts.

[i] The first step concerns Aristotle's method of inquiry in practical philosophy. Most of the commentators who defend the view that Aristotle's ethics is independent of his theoretical philosophy claim that ethics is dialectically grounded. According to *Topics* i dialectical syllogisms argue from premises that are *endoxa*, i.e., reputable opinions. However, the important question of whether in the *Topics* Aristotle considers dialectic as a method of inquiry or not has not received due attention from those scholars. They often assume that dialectic is a method of inquiry and consider it as Aristotle's ethical methodology on the grounds that Aristotle appeals to *endoxa* in ethical arguments. Hence, they claim that since Aristotle's arguments in the ethics reason from premises that are *endoxa*, those arguments require no extra-ethical

[18] Irwin 1981 thinks that the doctrine of the autonomy of the sciences does not apply to metaphysics and ethics. He thinks that Aristotle restricts it to the 'demonstrative sciences' such as arithmetic and geometry. Scott 2015, 156 agrees with Irwin in thinking that Aristotle uses metaphysics and psychology to establish the principles of ethics and politics. He also agrees with Irwin that the autonomy of sciences does not apply to ethics because it is not a demonstrative science. See Roche 1988 who disputes Irwin's view in the context of ethics by defending a strict doctrine of the autonomy of the sciences.

supplementation. And therefore, Aristotle's practical philosophy is not dependent on his theoretical philosophy.[19]

Debunking this methodological claim is of utmost importance for this project. This thesis claims that Aristotle employs a scientific methodology in his ethical inquiry as outlined in the *Posterior Analytics*. Although Aristotle utilizes certain dialectical strategies in his arguments in an auxiliary role, his premises are not exclusively *endoxa* but facts (*to hoti*) that might involve endoxic as well as non-endoxic claims. However, an ethics that is non-dialectically grounded, in other words, which does not rely on reputable opinions of the wise and the many, can still be independent of extra-ethical claims and theories. One might argue that although it is right that arguments of practical philosophy reason from and are corroborated with factual claims instead of *endoxa*, those facts need not be scientific facts in which the student of ethics needs to be specialized. All those factual claims might rest on some rudimentary knowledge that a well-brought up student of political science might already possess.[20] So, proving that Aristotle's arguments reason from factual claims but not *endoxa* is not by itself sufficient to show extra-ethical supplementation. I take this strategy seriously and will develop a response to it in the next step. However, by showing that Aristotle's practical methodology is compatible with a scientific method of inquiry, this thesis eliminates the strongest argument of those scholars who think ethics is strictly autonomous. In order to demonstrate that the premises of arguments that involve facts at the same time rest on Aristotle's theoretical philosophy, we will need further discussion.

[ii] The second step of the argument of this thesis is to show clearly that certain concepts, principles, or theories from extra-ethical treatises figure in Aristotle's

[19] Gomez-Lobo 1989, Klein 1988, Roche 1988, Nussbaum 1995, Polansky 2014, 2017.

[20] Recently a minority of scholars who dispute dialectical methodology in favour of a scientific method of ethics have defended such a position. They deny that Aristotle's ethics is dialectically grounded but they still claim that Aristotle's practical philosophy is autonomous along justificatory and explanatory lines. See e.g., Salmieri 2009 and Karbowski 2019.

substantial arguments in ethics. The argument at the center of such debates is the notorious *ergon* argument in *EN* i 7. Those who do not acknowledge that ethics is dependent on theoretical philosophy in any significant sense, claim that all the premises of the *ergon* argument are well-known beliefs (or *endoxa*) rather than any assumptions or claims taken from Aristotle's metaphysics, physics, or psychology. For instance, they argue that when Aristotle argues for the *ergon* of human beings, his attribution of an *ergon* to human beings should be taken in a 'loose' or 'rhetorical' sense. They deny that the concept of *ergon* is used in the same sense as it has been argued for or discussed in extra-ethical treatises. Similarly, they deny that the taxonomy of the functions—nutrition, perception, and reasoning— that Aristotle appeals to when he identifies human *ergon* rest on the classification of functions of plants, animals and human beings in *De Anima* or other scientific treatises. They argue that these are the things that ordinary folk could know by induction and that need not presuppose any familiarity with Aristotle's specialized accounts and theories in the scientific texts.

The *ergon* argument provides the ideal context in this step because it involves concepts and claims which also have counterparts in Aristotle's theoretical texts. Moreover, it also has a fundamental role in Aristotle's argumentation towards the chief human good, *eudaimonia*, which is the first principle of his political science. Therefore, demonstrating the main thesis of this project by examining the *ergon* argument, if successful, will strengthen its credibility to a considerable degree. In the methodological discussion, I eliminate the interpretation of those who claim that ethics is dialectically grounded and the premises of ethical arguments do not require extra-ethical supplementation. With the examination of the *ergon* argument, I further show that Aristotle in fact appeals to concepts and claims that rest on his metaphysics and natural science. I show that the concept of *ergon* is indeed used in the sense that is also employed in his theoretical treatises and Aristotle even argues for the *ergon* of human beings albeit in a rudimentary way. In this step of the argument I, thus, suggest

that while Aristotle's arguments reason from premises that as facts could involve endoxic and non-endoxic claims, those facts in the *ergon* argument are linked to and rest on concepts, accounts, and principles in his theoretical philosophy.

[iii] The third step which is intimately related to the previous discussions is concerned with the question to what extent the student of political science requires a grasp of theoretical knowledge. Whether the student of political science is expected to possess some specialized knowledge is also implicated in the discussion of the *ergon* argument above. However, in the above discussion, I pursue a different line of argumentation that tries to reveal whether the concept of *ergon* and some premises of the *ergon* argument rest on theoretical philosophy or not. Since I think the question about the epistemic condition of the audience of ethical and political inquiry merits more attention as an independent question, the third step of the argument is devoted to its examination. To ask and answer this question gains importance in a query concerning the autonomy of Aristotle's practical philosophy also because on occasion Aristotle makes some remarks about the extent to which the student of political science must be familiar with, e.g., the soul and its parts. Because Aristotle announces specific concerns about the character, age, experience and knowledge of his students, the commentators who reflect on explanatory and justificatory aspects of Aristotle's arguments often take into consideration also the epistemic status of the students of political inquiry.

The standard answer of those who take Aristotle's ethics to be strictly autonomous is that the student of Aristotle's ethics and politics requires merely a rudimentary grasp of biology, psychology, or other natural sciences. They believe that no specialized knowledge of e.g., the human soul and its parts is necessary for Aristotle's arguments in ethics and political science. Having first, shown that the premises of Aristotle's arguments are not dialectically grounded and second, that Aristotle appeals to the concepts and theories from his metaphysics or natural science, in the third step, I argue against this standard answer. I supplement my argument by

showing that the students of political science are expected to possess a sufficiently broad knowledge of theoretical sciences the acquisition of which would not be possible by observation and folk knowledge.

(iv) In the final step of my argument I center my attention exclusively on the phenomenon of natural slavery, a vexing question in Aristotle's political science. A satisfactory account of Aristotle's conception of natural slavery as mainly depicted in *Politics* i contributes to the argument of this thesis in the following ways: I argue that despite being endowed with an ineliminable rational incapacity, natural slaves are considered as legitimate human beings. Thus considered they indeed share the same defining *ergon* with the rest of human beings. Hence, we do not need to assume that Aristotle's theory of human nature that grounds his political science is inconsistent. Moreover, by showing that the phenomenon of natural slavery should be understood by elucidating their *ergon* as human beings and pointing to the link between the natural slave and the *ergon* argument in *EN* i 7, this essay also reveals how the theoretical concept of *ergon* and the theoretical context surrounding it illuminates the question of natural slavery. Finally, since Aristotle uses teleological principles to account for the nature of the slave, the political conclusions he draws rest on a teleological framework. Thus construed, the discussion of the phenomenon of natural slavery could be seen as an example case that remarkably shows the link between the theoretical grounds of an ethical and political phenomenon in Aristotle.

1.4. Synopsis of chapters

Chapter 1 is an examination of *EN* vii 1.1145b2-7, a methodological passage that has been considered the clearest announcement, endorsement, and application of the dialectical method. Commentators who are inclined to draw a firm line between Aristotle's practical and theoretical philosophies commonly hold that in his ethics Aristotle employs dialectical method that reasons from *endoxa*, i.e., reputable opinions. And almost all of them draw support for this assertion from the methodological

statement and its application at *EN* vii. According to this very influential line of interpretation, at *EN* vii 1 Aristotle describes a procedure in which, first, one should set down the appearances (*phainomena*) which are to be understood as *endoxa* regarding the subject of inquiry, second, test those *endoxa* by puzzling through them and third, show the truth of as many *endoxa* as possible. I argue that the received construal of *EN* 1145b2-7 is mistaken and a correct interpretation of that passage is in fact congruous with the scientific methodology. I provide an improved interpretation of this statement that reconsiders the role and the sense of the concept of *phainomena* in this passage and the subsequent discussion. In my interpretation, the *phainomena* in question needs to be understood to include facts that might involve endoxic and non-endoxic claims to be set down throughout the stages of the inquiry into *akrasia* and related dispositions at *EN* vii. In this methodological preface, Aristotle is in fact offering a more widely applicable account of what he does in ethics and in other treatises. He announces that he will carry out an inquiry on *akrasia* and other states based on *phainomena*, which might involve some *endoxa*, observations, and other presuppositions only insofar as they are facts. And the goal of the inquiry is to reach definitions and principles— a procedure that is consistent with the scientific methodology of the *Posterior Analytics.* Although Aristotle employs some dialectical strategies in this procedure, they only play a restricted role to facilitate the investigation and make the discovery of truth easier.

By undermining a dialectical construal of this procedure in *EN* vii 1 and providing an account that arguably squares better with the rest of the ethics, I argue that Aristotle's practical philosophy follows in fact a scientific method as employed in other scientific treatises which argue from facts and observations rather than opinions. This conclusion casts doubt on the interpretation of those who hold on to a rigid idea of the autonomy of the sciences together with a form of dialectical methodology in practical philosophy. They believe that the accounts or assumptions Aristotle uses in his discussions should be considered to rest on *endoxa* rather than the theories from

scientific treatises. However, the argument in chapter 1 shows that the role dialectic and *endoxa* play in *EN* vii has indeed been overstated. Neither does the division between practical and theoretical sciences necessarily entail different methodologies or practices. In both domains, Aristotle uses facts and observations heavily in various stages in his arguments. If this is correct and Aristotle in fact appeals to the *phainomena* that might involve endoxic or non-endoxic claims in practical texts, this also allows him to use claims and presuppositions from his scientific treatises without confining himself to reputable opinions of the wise and the many.

In chapter 2, I turn to the *ergon* (function) argument in *NE* i 7, one of the most important as well as controversial parts of Aristotle's practical philosophy. There is a considerable dispute over all its premises and it is also in the center of the debates concerning to what extent Aristotle relies on extra-ethical accounts and theories in this critical argument. In this chapter, I argue that the *ergon* argument rests more heavily on Aristotle's theoretical philosophy than has often been acknowledged. In this regard, I agree with those scholars who have argued that the *ergon* argument is not merely consistent with Aristotle's general teleology but is in fact an application of it. To show that, I analyze Aristotle's argument from the function of the bodily parts such as an eye, hand, and foot to the *ergon* of human beings 'apart from all these' (*EN* 1097b32: *para panta tauta*). I claim that Aristotle does not merely assume that human beings have an *ergon* but argues for it in a rudimentary manner.

Secondly, I will argue that Aristotle does not attribute an *ergon* to human beings just in a 'loose' or 'rhetorical' sense as it has been claimed by many scholars. It has misguidedly been thought that only artificial tools or organic parts can have an *ergon* in the proper sense of the term. Since human beings and whole living beings in general are not analogous to tools or organic parts that are instrumentally useful for a further whole and good, they cannot have an *ergon*. Instead, I will propose that Aristotle has a non-homonymous conception of *ergon* in the sense of the final cause and the essence of the thing. In this sense, the concept of *ergon* applies to artificial tools, organic parts,

and whole living beings such as plants and animals (including humans) indiscriminately. However, because of their specific natures tools and organic parts have an other-regarding *ergon* while whole living beings have a self-regarding *ergon*. Hence, whereas tools and organic parts depend instrumentally on a further whole and good to perform their defining functions, this is not the case with whole living beings. Whole living beings including humans are not subject to such a dependence relationship to perform their function and life activities which are good and beneficial for themselves. Therefore, Aristotle can plausibly claim that human beings have an *ergon* in the proper sense of the term without classifying them with artificial tools and organic parts.

Finally, I will argue for the claim that natural teleology which operates strictly in the case of other living beings does not determine human beings in the same way. I argue that human beings ubiquitously and always already exhibit their constitutive *ergon*, namely rational activity, to a certain extent due to their biological nature. Nevertheless, in contrast to other living beings who achieve their *ergon* and reach completion of their form 'always or for the most part', human beings require the absence of certain internal impediments and the presence of certain enabling conditions such as culture and education. I also discuss that in an important passage in *EN* i 9 Aristotle shows awareness of this tension between his natural teleology and the peculiar human condition and provides a solution that rests on one of his teleological principles from natural science. This, nevertheless, corroborates my claim that natural teleology figures in the *ergon* argument and hence in Aristotle's practical philosophy.

In chapter 3, I take up the question about the relationship between Aristotle's practical and theoretical philosophy from a different angle, namely, by analyzing what could be called 'the utility argument' which is developed in the *Protrepticus*. In the *Protrepticus,* an early text devoted to making exhortation to doing philosophy, Aristotle defends theoretical activity and knowledge against charges of uselessness by

critics such as Isocrates—an influential Athenian political thinker, rhetorician, and teacher. Consulting this argument in the *Protrepticus* proves useful for the following reason. Since this text is intended for inciting and encouraging its audience to do philosophy, Aristotle clearly pronounces the substantial role he assigns to theoretical philosophy in our practical lives, especially, in our political concerns and endeavors. The discussion of this role played by theoretical philosophy functions as grist to the mill as far as the question of the dependence of practical philosophy on theoretical philosophy is concerned. Aristotle is not as vocal on that subject in his later works. So far scholars have been arguing for strikingly opposing claims by appealing to the same passages, concepts, or arguments in the later ethical and political works. So, the debate concerning the dependence of political science on theoretical philosophy seems to have ended in a stalemate. Aristotle's utility argument in defense of theoretical philosophy in the *Protrepticus* allows us to reconsider the dependence relationship in a better light. However, as I will argue, the *Protrepticus* does not merely throw some light locally at a certain stage of Aristotle's philosophical development on this matter. Aristotle retains also in his later and more mature treatises his conviction about the utility of theoretical philosophy for political expertise, which he more vocally discusses in the *Protrepticus*. In this sense, the *Protrepticus* directs our attention to a strong commitment of Aristotle that we find throughout his philosophical career.

In this chapter, I more specifically argue for the following four claims: First, Aristotle coherently defends the view that while theoretical knowledge is intrinsically valuable and choiceworthy as an end in itself, it has some accidental utility in practical life. In this sense, theoretical knowledge is useful accidentally from the perspective of the agent who exercises *theôria*. Second, Aristotle considers theoretical knowledge of the human end, the human soul, and its parts as a requirement for the good person or politician to perform fine actions and lay down good laws. Here, theoretical knowledge is useful essentially from the perspective of the practical agent. Third, the theoretical knowledge required for the good person or politician has to be construed

in a non-minimalist sense, that is, it cannot be gained by mere observation or experience but rather by doing philosophy to some extent. Fourth, the non-minimalist requirement of theoretical knowledge for the good person or politician is retained in the later treatises. So, I argue that in the *Protrepticus* Aristotle thinks that the politician should possess sufficiently broad theoretical knowledge of the human end, soul, and its parts and political science depends on theoretical philosophy in some recognizable way. Moreover, Aristotle preserves his commitment regarding the requirement of theoretical knowledge in his more mature treatises.

In chapter 4, I examine the phenomenon of natural slavery as primarily argued for and discussed in *Politics* i. Although they are considered human beings in some passages, natural slaves are clearly denied participation in the good life and happiness by Aristotle, a fact which has perplexed Aristotle's readers and commentators up until today. The question of how Aristotle justifies this exclusion of a class of human beings is still a disputable subject in scholarship on Aristotle's practical philosophy. Whether Aristotle rests his claim about natural slaves on an ineliminable defective nature or not is the point of departure of this chapter. In the present scholarship, two influential lines of interpretation regarding the nature and status of the natural slaves receive attention and hence, are worth reviewing. According to one line of interpretation, Aristotle considers a natural slave as a human being who is endowed with a rational capacity like other humans. It is thought that the rational incapacity that justifies their enslavement is caused by their actions and habituation. The scholars who defend this interpretation deny that Aristotle deprives a class of human beings of participation in political activity and in the good life on the basis of their unavoidable defective nature.

According to the second line of interpretation, the natural slave is a subhuman with ineliminable congenital deformities that explain and justify their exclusion from participating in the good life as their free male masters. While the former view considers natural slaves as legitimate human beings, the latter treats them as subhuman and aligns them with animals. I claim that neither of these readings

provides a satisfactory account of natural slavery as in particular discussed in *Politics* book 1. I will suggest that the natural slave is a fully legitimate human being who nevertheless has an ineliminable rational deficiency. I will argue that this account of natural slavery is already implicated in Aristotle's *ergon* argument in *EN* vii 1 and thus there is no inconsistency between Aristotle's official account of human nature and his account of natural slavery. However, since the natural slave is capable of only a limited degree of rational activity and cannot deliberate well about how he should shape his life and his ends, it is beneficial and just for him to be enslaved and share a household with a free male master who is capable of *phronêsis* and ethical virtue. So, I conclude that Aristotle indeed justifies the exclusion of a class of human beings from participating in good life and happiness on the basis of their nature. Since Aristotle uses teleological principles in developing his account, the political conclusions regarding the natural slave rest on a teleological framework.

1.5. Methodology

This thesis is based on a careful reading of Aristotle's texts. The central text in chapters 1 and 2 is the *Nicomachean Ethics*, in chapter 3 is the *Protrepticus* and in chapter 4 is the *Politics*.

In chapter 2 on the ethical methodology, I focus more heavily on the *Nicomachean Ethics* because the key passage that is taken to be the paradigmatic statement of dialectical methodology occurs in *EN* vii. Similarly, in chapter 2 which is on the *ergon* argument I prefer *Nicomachean Ethics* because it is commonly considered to be a later and more improved treatise on ethics.[21] I do not assume that what Aristotle

[21] Aristotle wrote two treatises on ethics, namely, *Nicomachean Ethics* and *Eudemian Ethics*. However, these titles were probably added by later editors. There is also the *Magna Moralia* transmitted under Aristotle's name but its authorship is disputed. Although Plato's *Republic* incorporates ethical discussions, Aristotle is the first author who wrote ethical treatises in a unified way. See Annas 1993, 18 on a comparison of Aristotle and Plato on this matter. See Bobonich 2006, Kenny 2016 and Kraut 2022 on the relationship between Aristotle's ethical texts.

says in *EN* i 7 applies to the other *ergon* arguments in the *Eudemian Ethics* and the *Protrepticus* or vice versa.[22] Chapter 3 is heavily based on the discussions and passages in the *Protrepticus.* However, I eventually connect the discussion there with the counterpart claims in the *Nicomachean Ethics.* As I have already noted, because of its protreptic nature, the *Protrepticus* sheds important light on the link between theoretical and political philosophy, a feature that is less prominent in the later treatises. Finally, chapter 4 which is on natural slavery heavily draws on *Politics* i where Aristotle extensively discusses natural slavery.

Apart from those treatises, I discuss passages from other practical texts such as the *Magna Moralia* and the *Eudemian Ethics*, theoretical texts such as the *Metaphysics, Parts of Animals, De Anima,* and *Physics* as well as logical works such as *Posterior Analytics, Topics* and *Rhetoric* that help to illuminate controversial claims and passages. Arguably Aristotle is deeply indebted to Plato's ethical and political views. I will occasionally refer to works by Plato for various purposes, e.g., to compare and contrast certain claims and accounts or highlight some of Aristotle's ideas that have a precedent in Plato's dialogues. In the chapter on the *Protrepticus* I will appeal to Isocrates and his works because Aristotle seems to use Isocrates as a foil in the *Protrepticus* and thus, Isocratean texts such as the *Antidosis, Panathenaicus*, and *To Demonicus* can help to open up the meaning of some claims in the *Protrepticus*.

All the texts I have used are translations. However, I have sometimes amended those translations to suit my purposes. I note the translation I use when I cite a text for the first time or when I depart from the initially cited text. I frequently use transliterations or untransliterated Greek in parentheses when I want to highlight certain keywords, phrases, or statements. Although I do not presuppose any knowledge of Greek, on occasion I have retained a few transliterated Greek terms for

[22] Aristotle's earliest extant *ergon* argument seems to be in fragment B65 of his *Protrepticus.* A second version of the ergon argument is at *Eudemian Ethics* 1219a11-18. The *Nicomachean Ethics* version comes after both.

which no entirely satisfactory English synonyms exist, e.g., *ergon, endoxa, phainomena* or *theôria*. The discussions make the intended senses of these terms clear. Since all the interpretations of Aristotle's text are highly controversial, I often support my interpretation by benefitting from commentaries and secondary literature.

2. On the Alleged Epitome of Dialectic: *EN* vii 1.1145b2-7

2.1. Introduction

Whether Aristotle employs a scientific or a dialectical method of inquiry in general and in ethics especially is an ongoing debate. Put briefly, dialectical methodology involves dialectical syllogisms that reason from ἔνδοξα, i.e., reputable opinions, whereas scientific inquiries rest on syllogisms that reason from facts (*Top*. 100a25-30).[1] I believe that Aristotle practices a similar scientific method in his practical and theoretical philosophy alike. Nevertheless, one of the major obstacles to such a *scientific* interpretation has been a methodological statement that precedes the discussion on lack of self-control (ἀκρασία), self-control (ἐγκράτεια) and some related states in *Nicomachean Ethics* (*EN*) vii 1.1145b2-7. This passage has been the focal point of interest for those who engage in the debate. The received interpretation is that it is the clearest announcement, endorsement, and application of dialectical method. I argue that the received construal of *EN* 1145b2-7 is mistaken and a correct interpretation of that passage is in fact congruous with the scientific methodology. I show that the presupposition that this statement epitomizes dialectical method is in effect unwarranted. Although Aristotle employs some dialectical strategies in this procedure, they only play a restricted role to facilitate the investigation and make the discovery of truth easier.

Scholarship today offers a wide variety of interpretations of Aristotle's methodology. While the great majority of scholars believe that Aristotle practiced dialectical method in his ethics, Berti 1996, Nussbaum 1982, and Kraut 2006 think that

[1] In section 2.5 we will see that this crude description will have to be qualified in some ways, e.g., Aristotle allows some good dialectical arguments to start from ἄδοξα which are the opposite of ἔνδοξα.

Aristotle employs dialectic in all areas of inquiry.[2] Recently some, such as Frede 2012, have explicitly disputed this universal claim, along with Salmieri 2009, Natali 2007, 2010, and 2015, and Karbowski 2015 and 2019a, who have attacked the dialectical interpretation of Aristotle's ethics. Zingano 2007 and Cooper 2009 think that Aristotle employed dialectic in his early career whereas in his mature works, such as the *EN*, he abandoned it and opted for a less aporetic and puzzle-free scientific methodology.

The passage in *EN* vii 1 reads:

> We must, as in all other cases, [1] set the phenomena (τιθέντας τὰ φαινόμενα) before us and, [2] after first discussing the difficulties, [3] go on to prove, if possible, the truth of all the reputable opinions (ἔνδοξα) about these affections or, failing this, of the greater number and the most authoritative; for if we both resolve the difficulties and leave the reputable opinions undisturbed, we shall have proved the case sufficiently. (1145b2-7, Barnes ed. tr., sometimes modified)

According to the received interpretation, Aristotle tells his audience that the ensuing inquiry will be in three stages.[3] He will first set down the *phainomena*, i.e., appearances. Second, he will raise puzzles or difficulties based on the *phainomena* initially set down. Finally, he will show the truth of as many *endoxa*, reputable opinions, as possible.[4] It is generally agreed that these four claims hold true for *EN* vii:

(1) *Tithenai ta phainomena* means 'to set down the appearances', and those appearances are the *endoxa* listed at the outset.

[2] Irwin 1978, 1981, 1988, Roche 1988, and Lawrence 2006 restrict it to ethics. Burnet 1900, xxxi-xlvi thought the *EN* is 'dialectical throughout'. Owen 1961 claims that ethics and physics *qua* a philosophical discipline are dialectical. Broadie 2002, 385 takes the *EN* vii 1 method as Aristotle's 'characteristic method' that is described 'once' at 1145b2-7.

[3] Barnes 1980, Nussbaum 1982 and 1986, Bolton 1991, Zingano 2007, Natali 2010, Frede 2012, Scott 2015, and Karbowski 2015, 2019a offer generally the same account of the *EN* vii 1 method, their different nuances need not concern us here.

[4] I will use *phainomena* and appearances and *endoxa* and reputable opinions interchangeably.

(2) The inquiry involves three successive stages, namely, setting down the appearances, raising difficulties, and resolving those difficulties.

(3) The goal of the inquiry is to salvage all, or most, or the most authoritative *endoxa* by getting rid of conflicting views and modifying others.

(4) The method of *EN* vii 1, which is also called the 'method of *endoxa*' is the paradigm of the dialectical method.[5]

I think this account misconstrues what Aristotle says in this passage. By holding to the interpretation (1-4) listed above, we can neither make sense of what Aristotle actually practices in the following inquiry nor can we reconcile such a rigid method with what Aristotle does in the rest of the *EN* and other treatises. I try to rehabilitate the method of *EN* vii 1 by providing a clearer and improved interpretation of it, which agrees with the scientific methodology. I am broadly sympathetic to those scholars who think that Aristotle's methodology in general and ethics in particular is scientifically oriented. Nevertheless, they have failed to evade the prevailing dialectical reading of *EN* vii 1. Absent a satisfactory scientific account, *EN* vii 1 must be explained away. By reconsidering this passage, I hope to show that it accords with Aristotle's scientific approach both within and outside ethics.

In this methodological preface, Aristotle is in fact offering a more widely applicable account of what he does in ethics and in other treatises. He announces that he will carry out an inquiry on *akrasia* and other states based on *phainomena*, which might involve some *endoxa*, observations, and other presuppositions only insofar as they are facts. And the goal of the inquiry is to reach definitions and principles— a procedure that is consistent with the scientific methodology of the *Posterior Analytics* (*APo*). As outlined in *APo* ii, the scientific method of inquiry is based on arguments whose premises or starting points are considered facts (τὸ ὅτι) that are amassed

[5] The method practiced in *EN* vii has widely been called 'the method of *endoxa*' (Barnes 1980, 494). Instead, I will use the phrase *the method of EN vii 1* and its renderings to avoid inflation of names of methods and unnecessary connotations.

through reliable truth-gathering processes and contain a strong presumption of truth.[6] The goal of such an inquiry is to reach explanatory definitions that yield *epistêmê*, i.e., scientific knowledge. I think Aristotle employs dialectical method in a limited role which by itself is not sufficient for the discovery and justification of principles in philosophical inquiries. According to the *Topics* the art of dialectic equips us with a critical ability to reason on various sides of an issue and thus it can make the detection of the truth easier. However, I do not think dialectical method is necessary or sufficient for discovering the truth. In *EN* vii dialectic is used in such a restricted facilitating role in the service of the philosopher to contribute to the search for the scientific account of the states under scrutiny.

My alternative interpretation of *EN* vii 1 similarly boils down to four claims to be established in the course of this chapter:

(1′) *Tithenai ta phainomena* means to set down the appearances in a committed way with an assertoric force and those appearances are not coextensive with the *endoxa* listed at the outset.

(2′) The inquiry involves two successive stages, namely, raising and resolving difficulties. The appearances are used to guide and constrain the inquiry throughout.

(3′) While the preservation of some of the most authoritative *endoxa* might be a necessary requirement, the goal is to reach an account in the form of definitions.

(4′) Although *EN* vii employs some dialectical strategies, they merely play a restricted role to make the investigation of the difficult subject easier.

This account of *EN* vii 1 is deflationary and flexible in the sense that contrary to the common reception this procedure merely consists of two essential stages, and

[6] In *EN* 1098b3-4 Aristotle lists perception, induction, and habituation as examples of some of the sources from which facts originate. For perception of particulars see *APo* 81b6, 87b29-38, *Metaph.* 981b10-13, Cf. *Cael.* 306a16-7; *GA* 760b27-33. For induction from particulars to universals see *Metaph.* 981a10-12, cf. *APo* 81b5-6, 81b8-9.

the endoxic claims that fuel the puzzles do not necessarily occur in a discrete stage.[7] In order to develop this interpretation, I will appeal to passages and discussions both inside and outside the *EN.* Although I believe that the method of *EN* vii 1 has wider application in Aristotle's practical and theoretical works, I engage more with practical texts for two reasons. First, the controversial passage occurs in the *EN*, and thus it makes sense to relate it to ethical works in the first place. Second, as mentioned above, while there are some who claim that dialectical method is employed pervasively in both theoretical and practical works, the majority of scholars take it to be the method of ethics. Hence, although this work provides additional support from theoretical works, I take up the more challenging task by focusing attention on ethics. A treatment of the ramifications of this proposal in Aristotle's other works must wait for a future occasion.

In what follows I will argue for my claims (1'), (2'), (3') in sections 1-3 to provide a new and more adequate interpretation of *EN* vii 1 which challenges the received dialectical construal. In section 4 I will provide a brief overview of Aristotle's account of dialectic as set out in the *Topics* and discuss the limited role dialectic plays in the *EN* vii 1 procedure as described in claim (4').

2.2. Tithenai ta phainomena

The concept of *phainomena* that occurs in the methodological preface preceding the discussion of *akrasia* does not narrowly denote *endoxa* but denotes some *endoxa*, observations, or other presuppositions insofar as they are facts. I claim that when certain *endoxa* are treated as *phainomena*, it is by courtesy of their contents that involve

[7] Recently Davia 2017 provided another deflationary account of *EN* vii 1 that bears some *prima facie* resemblances to my account. Since he has a completely different interpretation of the terms *phainomena* and *endoxa*, his account diverges from mine. He takes up Frede 2012's suggestion that *kai* at 1145b3 can be read in an explicative sense and claims that by *tithentas ta phainomena* Aristotle means to put forth accounts of the subject under consideration (390). He thinks *endoxa* are only those views that are preserved after the difficulties have been resolved instead of the ones listed at the outset. See note 11.

a presumption of truth and not merely because they happen to be believed. In other words, the claim of my chapter is about the meanings of the terms *phainomena* and *endoxa*. I argue, contrary to the received interpretation, these two terms do not have the same meaning. That is why I acknowledge that some propositions that fall under the extension of *endoxa* can also fall under the extension of *phainomena*. Second, I suggest a different use of the verb τίθημι (1145b3: τιθέντας) which fits better with those *phainomena*. By *tithentas* what is meant is to set down appearances with commitment or an assertoric force. Thus construed, I will show that the task of *tithentas ta phainomena* does not correspond to making a list of *endoxa* at the outset since the *endoxa* are themselves in need of verification. Instead, the phrase refers to setting down the facts (i.e., justified truths) that might involve *endoxa* and observations in a criterial sense to guide and constrain the inquiry.

The phrase used by Aristotle as *tithentas ta phainomena* with a slight modification became the title of Owen 1961. Owen translated the phrase 'set down the *phainomena*', with a construal that influenced the commentators and the translators who followed him. For example, Barnes ed. 1984 has 'set the *phainomena* before us', Kraut 2006, 77 'set out what seems to be the case', and Rowe 2002 'set out what appears to be true about our subjects'.[8] All these authors concur with Owen in associating the *phainomena* to be set down with the list of *legomena* and *endoxa* at the beginning of the inquiry.[9] Owen 1961, 85 disputes Ross' translation of the term *phainomena* into 'observed facts' on the grounds that what Aristotle subsequently sets down are *endoxa*, and not observed facts. Owen thinks that the opinions in the list are *endoxa* because Aristotle concludes the survey with the words 'these are the things that are said [λεγόμενα]'. Further, Owen thinks, the *phainomena* cannot refer to the facts because Aristotle also says that Socrates' view of *akrasia* plainly conflicts with the *phainomena.*

[8] This passage occurring in a common book of the two *Ethics*, translators of the *Eudemian Ethics* also follow suit, see Inwood and Woolf trans. 2012 and Simpson 2017.

[9] Although in principle I do not identify all *legomena* with *endoxa*, I take the *legomena* of *EN* vii to be *endoxa*. Henceforth I will use *endoxa* alone in the context of *EN* vii for convenience and to avoid repetition.

Since Owen believes that Aristotle's conclusion about *akrasia* eventually coincides with what Socrates maintained, 'Socrates' claim conflicts not with the facts but with what would commonly be said on the subject' (86). Thus, Owen thinks what is commonly said on the subject, namely, the *endoxa* listed at the outset constitute the *phainomena* of Aristotle's argument.[10]

However, because Aristotle moves on to rehearse *ta legomena* after the methodological statement, we might be tempted to make two mistakes. The first is to infer that the term *phainomena* refers to the *legomena* and *endoxa.* The second is to take the meaning of 'set down the *phainomena*' as in the received interpretation to refer to enumerating the *legomena* and *endoxa*. These two mistaken temptations should be avoided. This reading is defended not merely by Owen and his followers, but the critics of dialectical method have also followed suit. For instance, Salmieri 2009, Frede 2012, and Karbowski 2013, 2015, and 2019a have identified the *phainomena* in vii 1 with the *endoxa* listed at the outset. They believe that *tithenai ta phainomena* exclusively refers to the initial procedure where Aristotle enumerates *endoxa* on the subject.

In chapter two, however, when he starts out raising difficulties, Aristotle mentions that Socrates is completely against the existence of *akrasia*, i.e., doing what one knows to be wrong. As Owen observed, Aristotle points out that Socrates' view contradicts the *phainomena* (1145b27). Nevertheless, among the *endoxa* listed at the outset, there is at least one view that closely resembles Socrates' view: 'The man of practical wisdom, they sometimes say, cannot be incontinent' (1145b17-18). Since this saying is consistent with Socrates' view, we cannot conclude, as Owen does, that the *phainomena* with which Socrates' view conflicts simply refer to the *endoxa* or need to be coextensive with the *endoxa* initially enumerated. Moreover, Aristotle arguably

[10] Nussbaum 1982, 267-268 endorses Owen's criticism of Ross with the same putative evidence. She urges that *phainomena* need to be translated as appearances or 'what we believe' or 'what we say', thus assimilating all *phainomena* to *endoxa*. The internal realist position that grounds her dialectical interpretation has rightly been criticized from various directions. See Wians 1971 and Cooper 1999 who criticize Nussbaum on that score.

treats Socrates' well-known view itself as an *endoxon*. If Socrates' view conflicts with *phainomena*, it is highly unlikely that the *phainomena* in question coincide with the entire initial list of *endoxa*.[11]

The parallel discussion on *akrasia* in *Magna Moralia* (*MM*) ii supports this conclusion in a remarkable way. The author of *MM* ii does not provide a list of *endoxa* before he raises any difficulties concerning the subject in question. As he invokes Socrates' view that rejects *akrasia*, he introduces it as one of the arguments that runs counter to *phainomena* (1200b20-24). He finds Socrates' view wrong and absurd, as it rejects 'what credibly occurs' (1200b31: τὸ πιθανῶς γινόμενον). Since we do not have a list of *endoxa* at the beginning of this investigation, the *phainomena* with which Socrates' view disagrees cannot be simply a collection of *endoxa* but more plausibly the reliable facts about *akrasia*. Sure enough, as facts they might at the same time be contents of beliefs held by some people. Yet, this does not contest their status as facts about 'what credibly occurs'.

In case some might disapprove of consulting *MM* due to the controversy concerning its authenticity, let me appeal to some evidence from the *Eudemian Ethics* (*EE*). At *EE* vii, when Aristotle sets out to investigate friendship, he initiates the discussion with some views by prominent thinkers such as Empedocles ('like is dear to like') and Heraclitus ('the opposite is dear to opposite'). Aristotle dismisses these two views (*doxai*) right away on the grounds that they are overly general and bring in extrinsic considerations to the inquiry (1235a29-30). By this, he means they bring in notions from general physics or first philosophy rather than sticking to pertinent considerations for practical science. Instead, he suggests that 'there are *others* (*allai*), which are obviously more relevant and germane to the appearances (*phainomenôn*)'

[11] The second point has also been made in Cooper 1999, 287. Frede 2012 attempts to reconsider the reference of *tithenai ta phainomena* but I believe her suggestion remains far-fetched. She suggests that the *phainomena* to be 'set down' need not be confined to the presuppositions but may also refer to the confirmed results of an investigation (188). However, instead of taking up this suggestion and drawing its implications, she follows the received interpretation. Inspired by Frede's suggestion, Davia 2017 developed an ingenious, but I believe mistaken account.

(1235a30-31, my emphasis). Thereupon, he proceeds by presenting the views of those who think that bad people cannot be friends, but only the good and who think that only the useful is dear and so on. Now, the term 'others' (*allai*) obviously is meant to refer to the 'other views' because they are presented as alternatives to the previous *doxai* that are far removed from the ethical inquiry. That he subsequently moves on to present other views also confirms this. So, if there are other *doxai* that are nearer or more appropriate to the *phainomena*,[12] then the term *phainomena* obviously does not pick out those dubiously relevant *doxai* but evidently refers to the ethically relevant observations concerning friendship with which 'other views' are more congruous.[13]

Additionally, in some methodological remarks in the *EE* Aristotle advises his audience to confirm arguments with the *phainomena* (1217a10) or to seek conviction 'using the *phainomena* as witnesses (*marturiois*) and examples (*paradeigmasi*)' (1216b27-8).[14] As the discussions following these remarks reveal, Aristotle often appeals to a range of appearances that include universally held beliefs as well as other *endoxa* (1219a40); facts about crafts that are familiar to Aristotle and his audience from ordinary life experiences (1219a2-5); observations about people's ethical practices or reactions with regard to certain character traits (1228a16-18) and so on. As these cases

[12] Although Aristotle is not against logical (*logikos*) arguments entirely, he often criticizes some predecessors for relying too much on general arguments without 'doing justice' (see *EE* 1236a25, *Metaph*. 1073b36f and b38f) to the facts pertaining to the subject in question (see *GC* 325a19-25, 316a5-10, *Cael.* 306a3-7, 306a7-17, *Resp*. 470b5-12). He urges to avoid general discussions which are more appropriate to the dialectical approach and instead advises that one should focus on experience and get familiar with the facts to take up questions in a scientific and philosophical way. A true education should avoid over-emphasizing such general argumentation but rather direct attention to the familiarity with the reality and the facts in order to allow students to distinguish what is relevant from irrelevant and what is true from false (see *EE* 1216b40-1217a10, Cf. *EN* 1181a12-b12). See Kelsey 2015, who instructively analyses some of those passages.

[13] I believe that *EE* vii on friendship bears close resemblances with *EN* vii in terms of the method employed. By contrast, Zingano 2007 uses it in defense of his view that Aristotle used dialectical method in his earlier works.

[14] Recently in his translation and commentary on the *EE*, Simpson 2013, 243 has misguidedly interpreted the term *phainomena* that appears in those passages as 'the prevalent opinions that, in ethics, are the relevant phenomena'. However, the only *endoxa* that are treated as *phainomena* in these specific roles as "witnesses" and "examples" in the *EE* are merely the universally accepted beliefs that involve a strong presumption of truth. Universal agreement is a sign of truth for Aristotle (*EN* 1172b36-1173a1). This is also emphasized in Karbowski 2019a, 117-119.

also attest, the *phainomena* deployed in the *EE* similarly refers to factual claims and these need not be coextensive with *endoxa*.[15]

Notice that in a parallel passage at *EN* i 8 where Aristotle reiterates the same point about deploying *phainomena* to corroborate arguments, he uses the term *huparchonta* interchangeably with *phainomena*.[16] Having reached a definition of happiness as a result of the function argument, he notes that he must consider this account in light of 'what is commonly said (*legomenon*) about it, for with a true view all the facts (*ta huparchonta*) harmonize' (1098b9-11; cf. *EE* 1221a25). When he shows that his account agrees with some reputable opinions by many and the wise, his description of those opinions as 'the facts (*ta huparchonta*)' is revealing. He undeniably treats those opinions as facts.[17] Hence, Aristotle appeals to those views not just because they are *endoxa*, but because he considers them factual claims the truth of which he takes for granted. This consideration is reinforced by a well-known passage in *Prior Analytics* (*APr*) i 30 where Aristotle explicitly says that experience provides the principles of any subject. He uses the term *huparchonta* interchangeably with *phainomena* and clearly enunciates that in any craft or science, the facts should be grasped before setting out the demonstration (46a17-27). This all-applicable

[15] However, Bostock 2000, Zingano 2007, Cooper 2009, and Devereux 2015 overlook this evidence and have directed their attention to the *EE* to explain away *EN* vii. They have argued that because *EN* vii occurs in one of the common books (*EN* vii=*EE* vi), it is a vestige of Aristotle's early period where he practiced dialectic, and that otherwise the *EN* is nearly free of dialectical method.

[16] See Salmieri 2009, Frede 2012, and Karbowski 2015, who stress this point. They argue for a close link between *phainomena*, starting points (*archai*) and 'what is familiar or more knowable to us' (*ta gnôrima*) as those premises or claims that initiate and guide the inquiry. They claim that these starting points are to be facts that contain a strong presumption of truth to get the inquiry off the ground toward first principles and causes—a point consonant with the starting points of scientific inquiry and my argument.

[17] In the *EN* Aristotle declares at least in two places that ethical starting points (ἀρχαί) are facts (τὸ ὅτι): 1095b6 and 1098b2. I take them to be starting points of inquiry rather than starting points of knowledge, that is, first principles. Although the ethical inquiry is distinctive in some ways, it still follows the program of *APo* ii in the sense that one starts with the unexplained facts of the domain and seeks causal definitions that explain them.

methodological remark concerning the import of the facts on the inquiry clearly extends to ethics, too (cf. *APr* 43a21-22, 46a3-4, 53a2-3).[18]

Hence, it is evident that *endoxa* and *phainomena* have different statuses and Aristotle does not treat all the *endoxa* concerning a subject matter as the relevant *phainomena* to be used. When Aristotle employs some *endoxa* among the *phainomena* of an investigation, he treats them under the description of facts that contain a strong presumption of truth. He seems to be committed to the view that the *phainomena* correspond to the facts, and as facts, they might involve *endoxa* as well as other observations and presuppositions which are the most likely true starting points.[19] In this sense, the core of the *phainomena* have a criterial function.[20] Inasmuch as they are facts they serve as the criteria or standards that a good account and the *endoxa* in circulation will be tested against. In this sense, they guide and constrain the inquiry to reach a satisfactory account.

Armed with an adequate conception of *phainomena* that fits Aristotle's use more accurately,[21] we should return to the methodological passage at *EN* vii 1. The next

[18] Salmieri 2009, 321ff. emphasizes Aristotle's employment of 'observations' and 'evaluations' about people, actions, states, etc. as starting points of inquiries in the *EN*. However, Salmieri seems to downplay the role certain *endoxa* play as *phainomena* in inquiries, perhaps as an extreme reaction to Kraut 2006, 79, who collapses all premises in Aristotle's arguments into *endoxa.* I concur with the assessment of *endoxa* by Karbowski 2015, 123, which rightly treats some *endoxa* that contain a presumption of truth as facts that could function as *phainomena*. Cf. Barnes 2011, 166-167.

[19] Even though some observations about ordinary life experiences are likely to be believed by most people and thus happen to be *endoxa*, Aristotle is not interested in them because they are *endoxa* but because they are truths that we are familiar with from ordinary experience. Thus considered one might wonder whether the methodological debate is merely concerned about whether *endoxa* or facts get us going or whether the debate is merely terminological. It might be true that much of what I argue here can be expressed in a different terminology in which case the next level of the discussion would be very much about the terminological shift. But I don't have the space to take up such a task. That said, it must be first noted that the term 'the fact' (τὸ ὅτι) is not present in the *Topics*, the major treatise on dialectic. It is only used in philosophical works (*APo* 78a36-7, 78b12, 89b24-7, 89b37-8; *DA* 413a13; *Metaph*. 1041a15; *EN* 1095b6, 1098b2). Second, I believe that the main drawback of dialectical method is that it does not seem to equip one with the ability to distinguish what is true from what is false, and it is not capable of producing *epistêmê*. More on this in section 2.5.

[20] Note that I don't claim that the *phainomena* are indefeasible and indubitable.

[21] See *GA* i 21 where Aristotle consults observations about copulation among certain insects, birds, and fish as facts (729b23) that corroborate his discussion about the contribution of the male to reproduction. For observations of 'what we have seen in the heavens' see *Cael.* 292a3, *Mete*. 345al, 343bl. Note that

thing to do will be to provide a better interpretation of *tithenai ta phainomena*. Let us recall the context. Once Aristotle makes the methodological remark, he proceeds right away to list a set of *endoxa* concerning *akrasia* and other states. After enumerating those claims, he starts his aporetic discussion to raise difficulties and subject those views to testing. *Tithenai ta phainomena* is commonly construed as 'setting down the appearances' in the sense of enumerating the *endoxa* prior to the aporetic discussion. However, as evidenced by the foregoing reflection, this interpretation is quite dubious.

I grant that a plausible translation of *tithenai ta phainomena* is 'to set down the appearances'. However, I think there can be two different ways in which one can use the verb *tithêmi*. (1) First, by *tithêmi* one can mean to set down certain claims with commitment, that is, with an assertoric force. In this sense, those claims can have a criterial role because of the conviction in their truth. (2) Second, by *tithêmi* one can mean to set down certain claims non-committally because the claims themselves will need verification. Regrettably, scholars have gone astray in taking *tithêmi* in the (2), non-committal sense and claiming that the *phainomena* to be set down are the *endoxa* that are claims that need testing and verification themselves. However, we should not give in to the temptation of associating *tithenai ta phainomena* with the survey of those endoxic claims at the outset just because the methodological statement is followed right away by a list of *endoxa*. Aristotle is indeed committed to the *phainomena* he employs, and he uses them in a criterial sense to guide and constrain the inquiry. In other words, the *phainomena* that will be set down should be already settled items that are ready at hand to be drawn in bit by bit as we go through the discussion. They will serve as the cornerstone of the inquiry. Therefore, I take Aristotle to mean that he will

Owen and most of his followers consider empirical observations to be *phainomena* in sciences such as astronomy, biology, and meteorology. See also Owen's reference to the perceptual *phainomena* as the ultimate criteria to assess the correctness of the principles in physics. He cites *Cael.* 303a22-23 (τῶν φαινομένων κατὰ τὴν αἴσθησιν) and 306a16-7 (τὸ φαινόμενον ἀεὶ κυρίως κατὰ τὴν αἴσθησιν) as textual evidence. (1961, 89-90)

set down some factual claims before himself with commitment for their criterial role throughout the inquiry and those *phainomena* which are treated as facts might involve certain *endoxa*, observations and presuppositions.

In light of these results, we have to reconsider the stages of that specific method. I shall now turn to claim (2′) about the stages of the inquiry which will also further our understanding of the foregoing discussion in a broader framework.

2.3. The stages of the method

According to the received interpretation, the method described and practiced at *EN* vii is composed of three stages. Having argued that *tithenai ta phainomena* does not refer to an initial collection of *endoxa*, we must also refrain from identifying the catalogue of *endoxa* at the outset as the first stage of the method. Once we do so, we will end up having merely two integral stages. In what follows, I shall first defend this claim with regard to *EN* vii 1 and then sketch out some cases in and outside ethics in support of it.

It is widely believed that the method of *EN* vii 1 is composed of the following three successive stages: (1) setting down the *phainomena* in the sense of collecting *endoxa,* (2) raising difficulties, and (3) resolving those difficulties by preserving all or the most or the most authoritative *endoxa*. As my discussion has so far revealed, we cannot retain (1). I suggest removing it as a discrete first stage. By setting down the *phainomena*, I take Aristotle to mean that he will set down certain endoxic and non-endoxic claims before himself in a criterial role while presenting *aporiai* and resolving them. The *phainomena* whose elements are reliable groundwork will be invoked and thus, set down *along* the investigation to guide and constrain the inquiry rather than in a discrete first stage.[22] Hence, p*ace* the prevailing view, I consider this method to

[22] One may contend that even if we take the *phainomena* in the sense suggested here, one will need primarily to have access to those premises. Hence, this task could be considered as a stage, and we would have three instead of two stages. I think this is true as a philosophical task that needs to be done,

include essentially two stages: (1) raising difficulties among *endoxa* and other presuppositions (2) resolving the difficulties and reaching an account by preserving some or the most authoritative *endoxa.* These are the only stages of this method there are. Here is an alternative translation of the methodological passage that squares better with this interpretation:

> As in the other cases, setting the phenomena before us and, [1] after first discussing the difficulties, [2] we must go on to prove here too, if possible, the truth of all the reputable opinions about these affections or, failing this, of the greater number and the most authoritative; for if we both resolve the difficulties and leave the reputable opinions undisturbed, we shall have proved the case sufficiently.

In what follows, I shall make two points to defend this interpretation. First, the reputable opinions surveyed following this methodological passage do not constrain the difficulties or the puzzles and their resolution. If the task of setting down the *phainomena* referred to that initial enumeration of the *endoxa*, one would expect those opinions to restrict the ensuing stages of the inquiry. Second, since *tithentas ta phainomena* does not refer to setting down the *endoxa* in a discrete step, a survey of the *endoxa* need not be an independent and integral stage of the method. I will illustrate this with some example cases in which a prior survey of *endoxa* is absent and the endoxic claims are introduced concurrently with the difficulty raising stage.

As to the first point, in the course of raising puzzles and resolving them, we observe that Aristotle can step out of the *endoxa* rehearsed and include unmentioned aspects of the subject under consideration. For instance, among the *endoxa* listed at *EN*

however, my point is rather whether Aristotle introduces those *phainomena* neatly as constituted by *endoxa* at the outset. One might also argue that whether Aristotle gives a collection of *endoxa* and *aporiai* separately or whether he combines offering the *endoxa* and those *aporiai* that arise from them is not an aspect of the procedure worth considering. However, it must be observed that by emphasizing the stages aspect of the *EN* vii 1 procedure, I correct a scholarly mistake which searches for an orderly three-stage procedure in Aristotle's discussions to assess the other applications of *EN* vii 1.

vii 1, one of them reads that "the incontinent man, knowing that what he does is bad does it as a result of passion, while the continent man, knowing that his appetites are bad, does not follow them because of reason" (1145b11-13). When Aristotle puzzles through the *endoxa*, we find an *aporia* at 1146a31-1146b2 that is only partly related to this *endoxon* and is not restricted by it. One part of the difficulty raised belongs to this *endoxon*, namely, that the incontinent man does what he does as a result of passion. Yet, the additional part about the curability of someone who acts on conviction and the incurability of the incontinent person does not stem from the previous *endoxon*. At least, the question of curability or incurability has not been raised as an aspect of the subject that needs to be examined. This piece of textual evidence reveals that Aristotle steps outside the endoxic claims listed or at least integrates some new objections that raise doubt on some unmentioned aspects of the subject. This finding is also important because it shows that Aristotle isn't as concerned about and aiming narrowly at refining and modifying *endoxa* and thus preserving all or most of the *endoxa* listed at the outset as the adherents of dialectical method are.[23]

With regard to the second point, the parallel discussion on *akrasia* in *MM* is my first example case from which a discrete section devoted to the *endoxa* is absent. At *MM* ii 6 the author does not catalogue *endoxa* separately and create the wrong impression that they constitute the whole supply of the *phainomena* to be employed as the bedrock of further argumentation, that is, to guide and constrain the inquiry. Following the parallel methodological passage, without enumerating the *endoxa*, he proceeds immediately to pose difficulties by introducing an *endoxon* on each occasion. He first introduces an *endoxon*, and then subjects it to an aporetic treatment right away

[23] See Scott 2015, 192 for various examples of puzzles raised without taking premises from the initial list of *endoxa*. Cooper 2009, Salmieri 2009, and Frede 2012 also recognize that Aristotle's investigation in the stages of presenting and resolving *aporiai* is not constrained by the *endoxa* listed at the outset. On the other hand, although the *phainomena* deployed throughout the discussion are not coextensive with the *endoxa* enumerated at the outset, it doesn't follow that Aristotle selects *endoxa* and *phainomena* in any haphazard way. As long as sufficiently many *endoxa* are introduced throughout the discussion it doesn't impede the thoroughness and comprehensiveness of the investigation.

(e.g., 1201a10-13). After he practices this procedure of introducing an *endoxon* and testing it simultaneously four times, the author indicates that he has the points which present a difficulty and that it is necessary to solve those difficulties (1201b1). Then he moves on to resolve those difficulties. Hence, instead of first assembling the *endoxa* and then puzzling through them in discrete stages, he undertakes both tasks simultaneously and proceeds to resolve the puzzles afterwards. In conformity with our interpretation of *EN* vii, the *MM's* discussion of *akrasia* occurs merely in two stages.

My second example case is the discussion of place at *Physics* iv 1-5. Similarly, we don't have a catalogue of *endoxa* at the outset that motivates the ensuing puzzles. We observe that during the discussion on place, Aristotle in fact presents difficulties with regard to certain *endoxa* in an entangled manner in chapters 1-3. In chapter 1, the inquiry begins by indicating that the physicist needs to know whether there is such a thing as place (*ei estin*) and what place is (*ti estin*) (208a27-29). After he enunciates that the question of what place is presents many difficulties (208a32: *pollas aporias*), he goes on to give arguments and pose puzzles concerning the existence and definition of place. The claims held by ordinary people or reputable thinkers are often presented with well-known *endoxa*-flagging markers such as *dokei* (208b1, 208b4, 209b28, 209b32) or *legousin* (208b26). He occasionally consults the views of some reputable predecessors by invoking them explicitly by name (e.g., Hesiod 208b28, Zeno 209a23 and Plato 209b11) in the course of presenting difficulties about different aspects of the subject. Hence, the employment of *endoxa* and the procedure of raising puzzles occur concurrently. In chapter 4, once Aristotle completes raising difficulties, he proceeds to present some "attributes that seemingly belong to" (*ta dokounta huparchein*) place that survive the preliminary discussion (210b32-211a6). After Aristotle resolves the difficulties in chapters 4 and 5, some of those attributes are left standing (212a20-30). It is worth noting that in both stages where he raises and resolves difficulties, Aristotle appeals to *phainomena* which involve some endoxic claims as well as certain

presuppositions or observations that Aristotle takes to be reliable in guiding and constraining the inquiry.

These brief overviews show that (1) raising difficulties and (2) resolving those difficulties to reach the truth about the subject matter constitute the whole procedure outlined and practiced at *EN* vii. Hence, we shouldn't consider the survey of *endoxa* as the first stage that is a *sine qua non* of the method of *EN* vii, a method as our examples attest has application in and outside ethical treatises.

A mistaken and superfluous argument used by the adherents of the scientific method to undermine a dialectical interpretation of Aristotle's methodology puts them in a conundrum. On the one hand, subscribing to the received interpretation of *EN* vii 1, they take its method to be dialectic. On the other hand, they do not admit that this method is employed in any other passages in Aristotle's corpus. They are committed to an account of the *EN* vii 1 that follows a systematically and rigidly structured three-stage procedure in which *endoxa* are gathered, tested, and preserved, while they try to show to their advantage that Aristotle does not employ this method anywhere else, and so deny he practices dialectical method ubiquitously. As my interpretation reveals, we need not appeal to this maneuver to ward off dialectical method. The correct interpretation of *EN* vii 1 is compatible with a scientific methodology, which also might strategically employ dialectic, and the practice of this sort of inquiry in various places does not have to be overly rigid.[24]

If I am correct that the task of setting down the *phainomena* need not refer to compiling a list of all the *endoxa* initially but *endoxa* may be introduced even in a piecemeal fashion throughout the inquiry as the perplexities are gone through, we

[24] For instance, Frede 2012, 202 has denied associating the discussion of place with the method of *EN* vii 1 partly because an initial list of opinions (*legomena*) and a list of *aporiai* concerning those opinions are absent from the discussion. She makes the same point for the discussion of friendship in *EE* vii. Karbowski 2013, 347 also writes that "any other legitimate application of this method must have the same three-stage structure exhibited by *EN* vii 1", and he also denies any methodological resemblances between the discussion on friendship in *EE* vii and *EN* vii 1 (2019, 131).

should not always expect a separate catalogue of the *endoxa.* Aristotle can introduce the endoxic claims concurrently with the perplexities they provoke and his resolutions. Once we appreciate *EN* vii 1 in this light, we recognize the inescapable dialectical aspect of Aristotle's scientific inquiry in any scientific field. My account explains the purport and the application range of the phrase 'just as in other cases' (ὥσπερ ἐπὶ τῶν ἄλλων, *EN* vii 1.1145b3). Aristotle announces that he practices this procedure here similarly as elsewhere.

2.4. The goal of the method

The goal of the method articulated and employed in *EN* vii is to work towards accounts in the form of principles and definitions. Resolving the difficulties and preserving the most authoritative *endoxa* lends these accounts credibility and makes them convincing. Thus, the *EN* vii method proves consistent with the scientific inquiry elaborated in *APo* ii.

Aristotle occasionally emphasizes that a good account should be able to shed light on the disagreements among different views.[25] Therefore, the success of the method described at *EN* vii 1 will also be measured with respect to its ability to resolve disagreements and puzzles among *endoxa* and its ability to preserve many or at least the most authoritative *endoxa*. However, I argue this doesn't constitute the ultimate purpose of this method.

Aquinas is one of the few commentators who rightly notices that in the *akrasia* discussion in the *EN*, after raising difficulties, Aristotle first considers 'the general aspect and then considers the peculiar nature of the subject' (1964, 363). At the beginning of chapter 3, Aristotle says that 'we must consider first, then whether incontinent people act knowingly or not' (1146b9-10), which reveals his intention first

[25] E.g., at *EE* 1215a20-22 Aristotle says that 'most of the disagreements and difficulties raised will become clear if we define (ὁρισθῇ) well what we ought to think happiness to be'.

to settle the question of there being incontinence and continence. He already said that Socrates' view conflicts with what appears, thus implying that he accepts incontinence. After Aristotle discards what is problematic in Socrates' denial, he confirms incontinence by showing 'what happens to such a man' (1145b28). He does so by developing three different manners of knowing something—actual and potential knowledge (1146b31-33), particular and universal knowledge (1146b35-1147a7), and different senses of being in possession of knowledge (1147a10-14)—to account for the knowing condition of the incontinent person and to defuse Socrates' argument. Then he continues the investigation as to 'what it is', to give an account of the nature of incontinence and other related states. Aristotle concludes the discussion by saying that he has 'stated what (*ti…estin*) continence, incontinence, endurance, and softness are' (10.1152a34-35).

Aristotle's continuous and sustained use of the phrase *ti esti* and its cognates in almost all philosophical inquiries flags his quest for scientific definitions and principles. He rejects any construal of the Socratic position that ethics is a theoretical science and knowledge of ethical concepts is the ultimate goal of ethics, since for him action is the ultimate goal of political science broadly construed (*EN* 1095a5, 1099b29-32, 1179a35-b3, *EE* 1216b10-25). Nonetheless, as seen here, Aristotle's ethical inquiry involves a search for the notions related to human ethical conduct. Hence, he says about happiness that 'a clearer account of what it is (*ti estin*)' (*EN* 1097b23) is desired; that 'we must investigate…virtue of character—what it is (*ti estin*)' (*EE* 1220a14); that 'we must investigate friendship, what it is (*ti esti*) and what qualities it has' (*EE* 1234b18-9) and so on (see also *EN* 1130b6-8, 1137b21-22, 1112a13, 1139b19-20, 1111a22-25, 1138b33-35, 1131b17-18).

Observe that according to *APo* ii 1, securing that a subject matter is (*ei esti*) and definitional (*ti esti*) questions are the major scientific questions in any subject domain.[26]

[26] Cf. Lennox 2021, 47 who takes *APo* ii to provide general philosophical norms applicable to all domains.

The resolution of the puzzle pertaining to *akrasia*, as we have seen, centers around the being of the matter and definitional questions—the two standard scientific questions (1146b9-10; 1152a34-5). Securing that there is a subject matter and determining what it is may be the result of induction widely construed to include dialectical dealing with perplexities and observations (see *APo* 71a1-17).

Observe that definitions of ethical concepts need not be different from the definitions of items in theoretical sciences in terms of their explanatory power. Hence, we should avoid associating ethical definitions with dialectical ones presented in the *Topics* or *De anima*. In *DA* i 1, Aristotle unambiguously contrasts a dialectical definition with a scientific one on the grounds that the former is not explanatory and cannot yield *epistêmê*, whereas the latter is. (403a2). That ethical definitions also have the same explanatory power as the scientific ones can be seen from the following passage in *EE* i 6 where Aristotle urges for the adoption of his methodological precepts.

> Now in every inquiry there is a difference between philosophic and unphilosophic argument (*methodon*); therefore, we should not think even in political philosophy that the sort of consideration which not only makes the nature of the thing (*to ti*) evident but also its cause (*dia ti*) is superfluous; for such consideration is in every inquiry the truly philosophic method.[27] (1216b35-40)

Its language (*to ti…alla kai to dia ti*) is revealing as it bears a striking resemblance to what Aristotle presents in *APo* ii 8 ff. If we take Aristotle at his word, this passage undeniably supports our claim about the scientific status of ethical definitions and the goal we ascribe to *EN* vii.[28]

[27] Relying on this passage and some other textual evidence, Inwood and Woolf 2012, xii-xiv argue that *EE* is more scientifically orientated than the *EN*.

[28] Resting their claims on Aristotle's several remarks about the 'imprecision' of ethics, some argue that in ethics and politics, Aristotle does not practice a scientific method. However, although Aristotle distinguishes ethics and theoretical disciplines on this score, this difference need not be pertinent to the method but rather concerns the results of the ethical inquiry. As far as I know, Aristotle nowhere says

The goal of this method, i.e., of scientific inquiry, is to reach definitions. Yet Barnes 1980, 492 and Brunschwig 2000, 118 instead propose that the preservation of 'the largest set of the initial *endoxa*' or 'sacrificing only the smallest possible portion of *endoxa*' is the goal of the method. First, as Socrates' view about incontinence being impossible is an *endoxon* introduced later, the goal need not be to obtain the largest set of the initially assembled *endoxa*. And second, if the goal was indeed to reach the largest consistent set of the initial *endoxa*, one would expect the views on the initial list to constrain the rest of the inquiry where Aristotle poses difficulties and suggests solutions to them. As I have already illustrated, however, the initial *endoxa* are not addressed one by one, and he also raises and works out additional questions, e.g., the difficulty raised about the curability/incurability of the incontinent person is not included in any endoxic views enumerated earlier (1146a31-b2).

Third, this unfavourable interpretation seems to have forced its adherents to treat any other credible claim introduced throughout the inquiry as *endoxon*. If the goal is restricted to save a consistent set of the *endoxa*, then all observations or presuppositions Aristotle brings in as premises to his arguments should better be collapsed into *endoxa*. Hence, they have a hard time in particular making sense of the arguments Aristotle introduces when he gets to resolve the puzzles. They think, e.g., that Aristotle's distinctions pertaining to different kinds of knowledge which he introduces to resolve the puzzle of *akrasia* are *endoxa* shared by Aristotle and Plato. If they can gloss over every premise of Aristotle's reasoning and treat them as if they were *endoxa*, only then they can consistently hold that the aim of the method is to preserve all or the majority of *endoxa* of this augmented set.[29] That said, my account

that the method of ethics should be different from that of the theoretical sciences. The manner in which he reaches his definitions of ethical and political concepts progressively by first establishing the being of the subject matters is consistent with the scientific method Aristotle applies in theoretical inquiries. See Anagnostopoulos 1994, Reeve 1992, and Karbowski 2019a, who try to explain how ethics can be a science despite the statements about 'imprecision'.

[29] This reading leads them to overlook the *phusikôs* argument Aristotle gives to elucidate the cause of *akrasia* from the sources of natural science which would undermine a dialectical interpretation (1147a24). See Bolton 1991, 21-22 who tries to downplay the role of this *phusikôs* argument in favor of a

renders such maneuvers superfluous. If the goal of the method is taken to be reaching principles and essential definitions as I construe it, we are liberated from trying to treat every proposition indiscriminately as *endoxa* and devise strategies to accommodate the text to square with our purposes. Otherwise, we end up resembling the mythological figure Procrustes the bandit, who cropped the limbs of his victims to force them to fit into his iron bed.

2.5. *EN* vii 1 and dialectic

Now that I have defended my claims (1'-3') that provide a new interpretation of *EN* vii 1 which is compatible with the scientific method, I shall discuss what role could be ascribed to dialectic in *EN* vii. To argue for my claim (4') that allows for a restricted role for dialectic, I shall turn to the *Topics* to provide a brief overview of the dialectical discussions.

Relying on the opening sections of the *Topics*, scholars often view dialectic narrowly as a type of argumentation that reasons from *endoxa*[30] and consider the statement at 100b21-23 to be the definition of the *endoxa*:

> Those opinions are reputable which are accepted by everyone or by the majority or by the wise—i.e., by all, or by the majority, or by the most notable and reputable of them.

However, a closer inspection through *Topics* reveals that there are at least two further important features of dialectical arguments. First, dialectical arguments proceed through question and answer between two disputants who take different roles (104a8-9). While the answerer is supposed to defend a 'thesis,' the questioner is supposed to

dialectical reading of *EN* vii. Cf. *EN* 1167b28ff where Aristotle consults arguments from natural philosophy for causes (1167b29: δόξειε δ' ἂν φυσικώτερον εἶναι τὸ αἴτιον).

[30] In *Top*. i 1 Aristotle presents a dialectical deduction in contrast with scientific demonstration, however, even if it is hardly mentioned, the dialectical disputants can use other modes of reasoning such as induction (*Top*. 155b21-2; 105a10-19) and analogical arguments (156b10-17).

construct an argument on the basis of reputable opinions and aims to refute the thesis by establishing its contradictory. Second, dialectical arguments lack any subjects of their own and hence can be about any subject matter whatsoever (100a18-21).[31]

Moreover, observe that the aforementioned statement about *endoxa* is not Aristotle's final word on the issue. Consider *Top*. i 10 where Aristotle enumerates what could be a dialectical premise in a dialectical argument:

> Now a dialectical proposition consists in asking something [1] that is reputable (ἔν δοξος) to all men or to most men or to the wise, i.e., either to all, or to most, or to the most notable of these, provided it is not paradoxical; for a man would probably assent to the view of the wise, if it be not contrary to the opinions of most men. Dialectical propositions also include [2] views which are like those which are reputable (ἐνδόξοις); [3] also propositions which contradict the contraries of opinions that are taken to be reputable (ἐνδόξοις), and also [4] all opinions (*δόξαι*) that are in accordance with the recognized arts. (104a8-15)

We read that dialectical premises involve [1] the *endoxa* mentioned earlier, [2-3] two new classes of opinions that are also treated as *endoxa* and [4] the opinions of experts from established arts. This extended list of *endoxa* suggests that what we have at 100b21-23 should not be treated as the definition of *endoxa*.[32] There Aristotle clarifies different types of *endoxa* rather than explaining their meaning.[33] This point is noteworthy because in dialectical debates, the questioner needs to argue from reputable premises that are acceptable to the respondent. Since he tries to deduce conclusions from the position of his opponent, the questioner needs assent to his

[31] In the *Rhetoric* Aristotle treats rhetoric as the counterpart of dialectic because both are concerned with things common for all to know and are "not about any separate genus" (1355b8-9).

[32] Whether the opinions of the experts (*hosai doxai kata technen eisin*) are *endoxa* is a controversial issue but at *Top*. 105a34-105b1 Aristotle treats the opinions of experts separately from the opinions of the wise and the many which might suggest that Aristotle does not see them as *endoxa*. This point need not concern us here.

[33] *Rhet*. 1356b28-35 says that rhetoric has to consider what is persuasive with regard to a certain type of group and similarly dialectic must distinguish what is *endoxon* with reference to several groups.

premises and thus has to appeal to reputable opinions that his opponent can concede.[34] The proviso added to the opinions of the wise confirms this. The opinion of the wise can be a dialectical premise "so long as it is not paradoxical: for someone will concede what seems so to the wise, if it is not contrary to the views of the many" (104a10-12). Therefore, we don't have a definition of what counts as *endoxa* but various types of *endoxa*, because arguments need to proceed on the basis of reputable premises that are acceptable to certain respondents.[35]

At *Top*. 100a18-21 Aristotle declares that the goal of the treatise is to "find a method (πραγματείας μέθοδον) with which we shall be able to construct deductions from reputable opinions." At 183a37-b1 he confirms this goal and says that "our intention was to find a certain power of deducing about a problem from the most *endoxa* (ἐνδοξοτάτων) premises."[36] Now, consider Aristotle's statement about the uses of the treatise:

> Next in order after the foregoing, we must say for how many and for what purposes the treatise (πραγματεία) is useful. They are three—practice, casual encounters, and the philosophical sciences. (101a25-28)

It is often thought that in this passage Aristotle mentions the uses of dialectic itself. However, arguably he provides the uses of the treatise rather than dialectic. Since the goal is indicated to be finding a dialectical art or method, Aristotle is most likely talking about the uses of dialectical art as provided in the treatise.[37] The *Topics* indeed involves instructions about how to get collections of endoxic premises that could usefully be employed by disputants as well as a system of rules, guidelines and

[34] See esp. *SE* 183b5-6; *APo* 81b18-22.
[35] See *Top*. 104a4-104a8, 105b11-12, 105b17-18.
[36] This is from the end of *Sophistical Refutations* and Aristotle always refers to it as part of the *Topics*.
[37] See *Top*. 101b11-13 where Aristotle describes the art of dialectic. See Smith 1993, 340-7, 1999 44-7 and Karbowski 2019a, 21-51, who emphasize this distinction.

strategies that will allow the interlocutors to execute valid arguments[38] in both competitive and cooperative debates.[39] The mastery in the art of dialectic generates a critical power that could be useful in three domains already cited. The third use which is concerned with philosophical sciences is of great importance for our purpose:

> For the study of the philosophical sciences, it is useful, [1] because the ability to puzzle on both sides of a subject will make us detect more easily the truth and error about the several points that arise. [2] It has a further use in relation to the principles used in the several sciences. For it is impossible to say anything about them at all from the principles proper to the particular science in hand, seeing that the principles are primitive in relation to everything else: it is through reputable opinions about them that these have to be discussed (διελθεῖν), and this task belongs properly, or most appropriately, to dialectic; for dialectic is a process of criticism (ἐξεταστική)[40] wherein lies the path to the principles of all inquiries (μεθόδων). (101a34-101b4)

The art of dialectic can be useful in two ways in philosophy. [1] The critical power will enable us to assess the assets and drawbacks of various opinions by raising difficulties on both sides. Note that Aristotle does not say that it can enable us to discover or find the truth that is sought but rather that it makes the detection of truth easier. So, dialectical art is presented as an ability to contribute to the discovery of truth.[41]

[38] Dialectical arguments differ from sophistical (*eristic*) arguments in which the questioner is not concerned about making valid arguments or whether the premises are acceptable to his opponent. The disputants in sophistical discussions can use any means to achieve their end and defeat the opponent.

[39] Competitive debates aim at victory whereas cooperative arguments (for trial [*peiras*] and inquiry [*skepseôs*]) aim at a common task of developing an argument from premises that are more endoxic than the conclusion. For further features of these debates see *Top*. 155b26-8, 159a10-14, 159a38-b22, 159b89, 160a14-17. See Bolton 1990: 212-19 on *peirastikê* and its relationship to dialectic.

[40] Socrates used the verb *exetazein* to 'examine' the opinions of others in order to refute them and reveal their ignorance (See *SE* 183b6-8 where Aristotle mentions Socratic examination and associates it with dialectical arguments). Nevertheless, in this passage examination of views is said to be useful in discussing principles which is a far cry from claiming that by examination the dialectician establishes scientific principles.

[41] Devereux 2015, 134-9 and Salmieri 2009, 312-13 acknowledge a restricted role of dialectical art in philosophy.

This interpretation is supported by a passage towards the end of the *Topics* where Aristotle clearly enunciates that for discerning the truth, we require another ability:

> And also, when it comes to knowledge and the wisdom that comes from philosophy, being able to discern—or already having discerned—the consequences of either assumption is no small instrument: for it remains to choose one or the other of these rightly. In order to do that, one must be naturally gifted (εὐφυᾶ), and this is what it is to be naturally gifted (εὐφυΐα) with respect to truth: to be able properly to choose the true and avoid the false. (*Top*. 163b9-15, tr. Smith)

So, although dialectical art can equip us with a critical ability to reason on both sides of a subject matter which contributes to truth seeking, it is incapable of discovering the truth. For it we need to be 'naturally gifted.'[42] Although Aristotle is not clear about the nature of this 'giftedness' and its role in his theory of knowledge, his point about the insufficiency of dialectic is obvious.[43]

The second use of the art of dialectic is in relation to the first principles. Owen and many others take [2] to be the declaration that dialectic establishes first principles of the sciences.[44] However, Aristotle merely says that 'discussing' (διελθεῖν) the starting points of philosophical sciences is especially appropriate to dialectic. Critical examination of the views of the wise and the many is clearly a part of Aristotle's philosophical method, however, this passage which deserves a more extensive treatment than can be provided here does not say that dialectic can establish those first principles.[45]

[42] See Barnes 2011, 168 which makes the same point.
[43] See Devereux 2015, 131-134 on Aristotle's treatment of dialectical discussions and philosophical inquiry as distinct activities in the *Topics*.
[44] Owen 1961, 92.
[45] Irwin 1988 grants that in the *Organon* and *Physics* Aristotle treats dialectic as a mere critical instrument. He thinks that dialectic "has a way towards first principles" and helps philosophy to

Note that Aristotle often indicates that dialectic is in fact incapable of proving (*deiknunai*) anything (*APo* 77a31-5; *SE* 171a38-b2; 11, 172a15-20; *Rhet.* 1355a33-5).[46] It is right that in those passages what is denied to dialectic is demonstration. Nevertheless, it would be surprising if Aristotle thought dialectic can establish first principles of sciences while it cannot fulfill the less demanding task of demonstrating claims.

That the discovery of truth is not within the power of dialectical art and hence the fact that truth is not the concern of the disputants is best evidenced by the selection of the dialectical premises. As already mentioned, in a dialectical exchange the questioner tries to deduce conclusions on the basis of beliefs that are acceptable to his opponent[47] and he needs to have at his disposal various classes of beliefs that are relative to the wise, the many or the expert in order to advance premises that his opponent can concede.[48] Aristotle ranks certain opinions as more or less *endoxon* on the grounds that they attract more or less reputation, not because they have higher or lower truth value.[49] For instance, a more or most *endoxon* premise is one that is accepted by all relevant groups. A more *endoxon* premise is a more reputable proposition and such a premise is more likely to be accepted by the opponent than a less *endoxon* one. [50] Note that a questioner might need to base his arguments on

discover first principles however, it is not capable of establishing them. He supposes that in the *Metaphysics* Aristotle abandons his earlier position and proceeds to practice what he calls 'strong dialectic.' I think the restricted role Aristotle ascribes to dialectic is retained in the *Metaphysics*. In the *Meta.* 1004b23-4 Aristotle distinguishes philosophy from dialectic in terms of its power (*dunamis*): "Dialectic is merely capable of testing (πειραστική) whereas philosophy is capable of producing knowledge (γνωριστική)" (1004b25-6). See *Metaph.* 995b20-25, 1004b15-26 for some of Aristotle's remarks on methodology where he explicitly distinguishes the task of dialectic from philosophy. Cf. Berti 1996, who argues against Irwin's developmental thesis about methodology.

[46] See Smith 1997, 54 and Karbowski 2019a, 41 who make the same point.

[47] Sometimes the answerer concedes or refuses propositions with reference to a different person rather than himself. For instance, one can adopt the persona of a famous person such as Heraclitus (*Top*. 159b27-35) and provide responses that are confined to the belief set of that person.

[48] See Rapp 2017, 123-129 for an illuminative and instructive discussion of the relativized and non-relativized interpretation of dialectical premises and whether dialectic has any serious concern for truth and his negative conclusion.

[49] See *SE* 175a32-34 where Aristotle contrasts 'deducing something ἐνδόξως' with 'deducing ἀληθῶς'. I borrow this passage from Frede 2012, 195, n. 24.

[50] See Bolton 1990, 208-12 for degrees of reputability of different types of *endoxa*.

premises that are recognizably false or argue for similarly false conclusions.[51] Hence the selection of *endoxa* in dialectical debate seems unlikely to express any concern with the truth but rather occurs with a view to a certain individual or a group.[52] Indeed, dialectical argument seems to be exempted from a truth requirement, and we don't find any passages where Aristotle advises dialecticians to assess the premises they present or concede with reference to truth.[53]

In the *Rhetoric* where Aristotle treats rhetoric hand in hand with dialectic, he writes that "neither rhetoric nor dialectic is the scientific study of any separate subject: both are faculties for providing arguments" (1356a32-5). He further warns that "the more we try to make either dialectic or rhetoric not what they really are, practical faculties, but sciences, the more we shall inadvertently be destroying their true nature" (1359b10-14). So, he indicates that while rhetoric or dialectic as faculties for providing arguments may deal with any subject of sciences, the full philosophical treatment of those subjects falls to the relevant sciences (1359b16-18).

In light of this brief and incomplete discussion of dialectic let us consider our passage at *EN* vii 1 before we conclude this section. I believe that the role the art of dialectic plays in *EN* vii 1 is a facilitating role to critically examine various views to contribute to the detection of truth more easily as described in its first use in *Topics* i 2.

Note that in the *MM* ii 6 version of the methodological preface prior to the investigation of *akrasia*, the author seems to justify the use of that specific procedure

[51] See *Top*. 161a24-33, 162a8-10. At 162b27-28 Aristotle says: "For if it depends on false but reputable premisses, the argument is dialectical; if on true but implausible premisses, it is bad."
[52] See Frede 2012, 195 and 199 and Devereux 2015, 131-134 in support of this point.
[53] In several passages Aristotle claims that dialectical arguments are 'according to opinion' (*kata doxan*) while scientific ones are 'according to the truth' (*kat' alêtheian*): *APo* 81b19-23, *APr* 46a4-10, 65a35-37, *Top*. 105b30-37, 162b31-33. In scientific arguments the truth is the ultimate standard rather than who believes what.

with a similar role in mind. The linguistic parallels of the first use of dialectical art at *Topics* 101a34-7 and this passage are indeed close:

> But with regard to incontinence and self-control we must first state the difficulties and the arguments which run counter to appearances, in order that, having viewed the matter together from the point of view of the difficulties and counterarguments, and having examined these, we may see the truth about them so far as possible; *for it will be more easy to see the truth* in that way. (1200b20-24, my emphasis).

If in *EN* vii Aristotle was using dialectic in a more substantial role to establish principles and if *EN* vii 1 was its declaration, one would expect such a statement to occur at the beginning of the treatise rather than in the seventh book of a ten-book treatise. Observe that at the beginning of his treatises, Aristotle discusses at considerable length the methodological precepts that he would pursue in those works.[54] If dialectic had any such important role in seeking and discovering first principles one would expect to find some remarks hinting at it in those methodological reflections and not at the outset of a random subject of *akrasia* towards the end of the *EN*. To conclude I believe that dialectical strategies play an unquestionable role in the *EN* vii discussion as well as other cases where the *EN* vii 1 procedure is employed, be it in practical or theoretical works. Nevertheless, owing to the restrictions Aristotle places on dialectic in philosophical inquiries, this role is a restricted facilitating one to contribute to the discovery of principles and causes.

2.6. Conclusion

To sum up, having claimed that the methodological passage at *EN* vii 1 has been misconstrued by both the advocates and the critics of dialectical method, I have

[54] See Lennox 2021, who directs attention to the opening books of Aristotle's treatises where methodological concerns to be pursued are discussed.

provided an improved and more adequate account of this procedure which is more widely applicable than some scholars have thought. I have argued that the traditional account has made two basic mistakes of identifying the term *phainomena* with *endoxa* and considering *tithêmi* in the sense of 'set down' without commitment or any assertoric force. This misreading has led them to associate the procedure described by *tithenai phainomena* with the catalogue of the *endoxa* at the beginning of the inquiry. I have suggested that Aristotle, in fact, means to *set down* the appearances in a committed way. Aristotle enunciates that he will carry out the inquiry by employing the *phainomena*, that is, the facts that might involve certain *endoxa*, observations and other presuppositions to guide and constrain the inquiry throughout. This interpretation has revealed that the method of *EN* vii 1 essentially comprises two stages where certain puzzles are raised and resolved afterwards. Since the claims that are subject to testing can be introduced simultaneously as difficulties are raised, a collection of the *endoxa* need not occur in a discrete initial stage. Further, I argued that the goal of the method cannot simply be resolving inconsistencies among various claims to salvage the largest coherent set among the initial *endoxa*. Rather Aristotle aims to reach an account in the form of a definition of *akrasia* and other states by inquiring into two standard scientific questions concerning existence and definition while preserving some or the most authoritative *endoxa*.

In conclusion, I want to suggest that we should stop using the phrase the 'method of *endoxa*' which is not present in Aristotle's text but has been coined by Barnes and has widely been embraced by scholars. Since this label does not solely refer to the use of certain *endoxa* in an inquiry but has come to denote a substantial method as outlined in the introduction, this term is not innocuous, and it should be treated with caution. Further debates on the methodology in connection to *EN* vii 1, should instead employ the term 'dialectic' and its renderings which is Aristotle's own preferred term to call the type of arguments that rest on endoxic premises. However, *EN* vii 1 cannot even be considered to epitomize dialectic. The method of *EN* vii 1 is

ultimately consistent with the scientific methodology whereas it employs some dialectical strategies for their facilitative role. Hence, we should bear in mind Aristotle's admonition in the *Rhetoric* about refraining from making dialectic what it really is not while acknowledging the limited role it plays in philosophical inquiries.

Finally, I submit that the methodological passage at *EN* vii 1 need not take the centre stage in the debate about the method and should not be used to test other texts for their adherence to dialectic. Its prominent place and privileged status have been a result of the received interpretation which is mistaken. Hence, we don't need to treat it differently from the parallel methodological passages that occur in *MM* ii (*akrasia*), *EE* vii (friendship) and *Phys.* vi (place) where the method is broadly scientific, and some dialectical strategies have similarly been employed in a limited role. However, the application of the results of this study on similar passages should wait for a future occasion.

3. The *Ergon* of Human Beings in *EN* i 7

3.1. Introduction

In *Nicomachean Ethics* (*EN* henceforth) book 1 Aristotle argues towards a preliminary account of the chief good that he can only provide after he makes his notorious 'function argument' in chapter 7.[1] Because of its significance in Aristotle's argumentation towards a definition of the good, scholars have closely scrutinized every bit of the argument to reach a better understanding of Aristotle's account. Nevertheless, there has hardly been any consensus on any aspect of the argument, and it remains a hotly debated topic in Aristotelian scholarship. This chapter takes up one of the most controversial questions that has divided the scholars on this argument. It claims that the *ergon* of human beings must be construed against a teleological framework of Aristotelian natural science.[2] Some form of this claim has often been advanced by the critics of Aristotle's practical philosophy to argue that his theory of the good is no more relevant to us today due to its outdated natural foundations. In an attempt to defend Aristotle against such disqualifying treatments, those who are sympathetic to his practical philosophy have gone too far and severed almost all the links between his ethics and natural teleology to prove that his ethics is not tainted by his natural philosophy. This chapter tries to adjudicate this debate by remaining faithful to Aristotle's writings without any further agenda. In an Aristotelian spirit, it

[1] I will mostly leave '*ergon*' and its cognates transliterated throughout the chapter to remain neutral on some semantic connotations of the word 'function'.

[2] Not many scholars construe the *ergon* argument with the teleological framework of Aristotelian natural science. See e.g., Barney 2008, Roche 1988, Gomez-Lobo 1989, McDowell 1995, Burnet 1900, Karbowski 2019a, Pakaluk 2005, Polansky 2014, 2017, Nussbaum 1986, 1995, Lawrence 2006, Annas 1993. For some works that construe human *ergon* in *EN* i 7 in the context of general teleology see Whiting 1986, 1988, Irwin 1980, Striker 1996, Tuozzo 1996, Bostock 2000, Johnson 2005, Shields 2015, Leunissen 2015, and Rabbås 2015.

argues that both poles of the debate are partially right and partially wrong in their interpretation of the *ergon* argument. While I acknowledge with the critics of Aristotle's practical philosophy that Aristotle's theory of natural teleology figures in the *ergon* argument, I submit that this reading does not entail the following two claims which will be elaborated on in a while: First, the fact that human beings have a natural *ergon* does not entail that they—like their bodily parts—are for the sake of a 'larger whole.' Human beings are not designed or created by a further nature to have a specific purpose so that their life could have a point or meaning only in the context of a larger system. Second, natural teleology does not determine human beings as strictly as it does other living beings and hence to achieve their *ergon* fully and become good and happy individuals, human beings require certain internal and external enabling conditions.

In *EN* i 7 before Aristotle arrives at his account of human good, he reviews certain views concerning the good held by the multitude and the wise. He critically examines the life of pleasure and political life and notes that he will return to contemplation later. Then he goes to great lengths to examine the Platonic form of the good. He argues that the good cannot be univocal as the Platonists understand it but rather "good is said in as many ways as being" (*EN* i 6.1096a24) in accordance with different categories that we are familiar with from his logical works. The good that is relevant to us, he argues, must be "something doable and capable of being acquired by a human being" (1096b34) and hence "something separate 'itself by itself' will not do.[3] Having critically examined and dismissed alternative accounts of the good, Aristotle argues for two formal criteria that the right account of the good should fulfill: the human good must be both complete (1097a28: *teleion*) and self-sufficient (1097b7:

[3] Johnson 2005, 217–18 draws attention to the fact that in both the *EN* and *Eudemian Ethics* (*EE* henceforth) Aristotle introduces the *ergon* argument after he argues against a Platonic univocal concept of the good.

autarkes).[4] 'Happiness' which Aristotle articulates for the first time in this context (1097a36) seems to fill the bill. However, Aristotle doesn't rest content with the account he has reached so far, because as he indicates, to say that happiness is the chief human good is merely a platitude. There is still a need for a 'clearer' definition and thus the account given should be refined further. This is exactly where Aristotle advances his *ergon* argument to provide a more precise and informative account of the human good, i.e., happiness.

The argument starts as follows:

> Presumably, however, to say that happiness is the chief good seems a platitude, and a clearer account of what it is is still desired. This might perhaps be given if we could first ascertain the function of man. For just as for a flute-player, a sculptor, or any artist, and, in general, for all things that have a function or activity, the good and the 'well' is thought to reside in the function, so would it seem to be for man, if he has a function. [1] Have the carpenter, then, and the tanner certain functions or activities, and has man none? Is he naturally (πέφυκεν) functionless (ἀργόν)? [2] Or as eye, hand, foot, and in general each of the parts evidently has a function, may one lay it down that man similarly has a function apart from all these? What then can this be? (*EN* i 7.1097b22-1097b33).[5]

In this opening part, Aristotle reasons with two arguments that man has an *ergon* which have been subject to much debate among scholars. The first can be called the argument from the crafts and the second, the argument from the bodily parts.[6] In

[4] The formal criteria Aristotle introduces have a precursor. At *Philebus* 22a-b Socrates and Protarchus agree that the good life for a human being must be complete (*teleon*), sufficient (*hikanon*) and choiceworthy (*haireton*).

[5] Unless indicated otherwise all the translations from Aristotle's extant treatises are from Barnes 1984 with occasional modifications. All the translations from the *Protrepticus* (Pistelli edition) belong to Hutchinson and Johnson 2017.

[6] Barney 2008 calls the second one the argument from the organic parts. She provides a comprehensive analysis of the argument from the crafts in the same work.

section 1 I claim that Aristotle doesn't merely assume but argues for the '*ergon*' of human beings in a rudimentary manner. I will claim that the argument from the bodily parts to the *ergon* of man should be understood in the context of Aristotle's natural teleology. As a living organism, human being is a natural substance that has a proper *ergon* over and above the *erga* of its parts. And due to the teleological relationship between bodily parts and the whole human being, the *erga* of the parts can only be construed in light of the *ergon* of the whole human being.[7] So considered, the *ergon* argument is not merely consistent with his general teleology but is in fact an application of it.

In section two my point of departure will be a prominent line of interpretation that denies human beings a function on the grounds that something can have a function only if it acts instrumentally as a part of a larger whole. On this view, we must construe human *ergon* in the *ergon* argument in a 'loose' or 'rhetorical' way because human beings are not analogous to artificial tools in the sense that they are not functionally subordinate to a further thing to whose good they contribute in being good themselves. Against this common interpretation, I will first argue for a non-homonymous conception of *ergon* which is identified as the end or final cause and as such, the essence of the thing. I will claim that this concept of *ergon* applies indiscriminately to artificial tools and organic parts as well as whole living beings including humans. Then I will show that because of their specific natures, the tools and organic parts have an other-regarding *ergon* whereas whole living beings have a self-regarding *ergon*. While the *ergon* of the former depends on the *ergon* of a further thing to which they are related, the *ergon* of the latter has not such a dependence relationship. Thus, like other living organisms, human beings also should be

[7] Tuozzo 1996 is one of the few papers that suggests such an interpretation of the argument from the bodily parts. He arrives at the same conclusion with a different argument. His interpretation has not drawn much support from scholars, though. Recently, Leunissen 2015 has made some quick observations in this direction to show that natural theories play some justificatory role in Aristotle's practical philosophy.

construed to have a self-regarding *ergon*, which as their end manifests what is good and beneficial for them.

In section 3 I will argue for the claim that natural teleology does not determine human beings as strictly as it does other living beings. In *EN* i 7 Aristotle argues that human *ergon* is "an activity of the soul in accordance with reason or at least not entirely lacking it" (1098a7). As the good of a thing resides in its *ergon*, the good of man turns out to be "activity of soul in conformity with excellence" (1098a20). In an important remark, Aristotle notes that the *ergon* of a thing and the *ergon* of a good thing are the same in kind (1098a9-10). So, when a human being performs excellent rational activity and becomes good, he doesn't change in kind and acquire a new property but achieves his constitutive *ergon* fully. I argue that human beings ubiquitously and always already exhibit their constitutive *ergon* to some extent due to their biological nature. Nevertheless, the complete fulfilment of human defining *ergon* which involves excellent rational activity extends beyond the biological nature. While according to natural teleology as presented in *Physics* ii natural beings achieve their *ergon*, and hence reach completion of their forms always or for the most part, human beings rarely bring their defining *ergon* to completion and become good. To achieve that they require the absence of any internal impediments and the presence of certain external enabling conditions. Hence, natural teleology does not determine human beings as strictly as other living beings. I also discuss that in an important passage in *EN* i 9 Aristotle shows awareness of this tension between his natural teleology and the peculiar human condition and provides a solution that rests on one of his teleological principles, which nevertheless corroborates my claim that natural teleology figures in the *ergon* argument and hence in Aristotle's practical philosophy.

3.2. The argument from the bodily parts

In the opening part of the *ergon* argument as quoted in the introduction, the argument starts with an assumption the truth of which Aristotle takes for granted. We are told

that "in general, for all things that have an *ergon* or activity, the good and the 'well' is thought to reside in the *ergon*" (1097b26-7). Hence if man also has an *ergon* and if we can identify what that *ergon* is, we will see that the good of human being will lie in performing that *ergon* well. That said whether the statement that man also has an *ergon* should be considered as a second assumption the truth of which Aristotle takes for granted or whether there is in fact an argument for it is a matter of debate. After all, what we have is just two seemingly sketchy arguments in the form of two main questions: one concerning the crafts [1] and the other concerning the bodily parts [2] (1097b29-34).

The reception of these two questions varies among scholars. Some older commentators have taken them to be an inductive or an analogical inductive argument for the *ergon* of man.[8] Many have thought that as an induction or analogical argument, it is either a very weak or a fallacious argument.[9] More recently Mariska Leunissen and Christopher Shields have argued that Aristotle simply assumes that human beings have an *ergon* and [1] and [2] are just rhetorical questions that never establish the *ergon* of man. Although there are some distinctive nuances setting their views apart, both claim that the *ergon* argument is related to the theories developed in natural treatises. Leunissen argues that the argument from bodily parts assumes a familiarity with Aristotle's natural teleology and "that there is a characteristic function or praxis of humans…is a fact already established by natural science" (2015, 230). Shields cautions that one should not call the argument at i 7 as 'function argument' insofar as it is presupposed that it sets out to 'prove' that human beings have a function. He thinks that Aristotle does not set out to "establish *ab initio* that humans have a function," but "he rather assumes that humans have functions, and then

[8] Burnet 1900 considers the argument as an induction, and Cooper 1986 as an analogical induction. Cf. Lloyd 1968, 69.

[9] McLaughlin 2001, 301 has claimed that the function argument is 'a paradigm of pars pro toto fallacy', i.e., he thinks that Aristotle fallaciously assumes that what is true for the parts is true for the whole. See also Suits 1974 for a similar view.

investigates *what* this is—not *whether* it is" (241, his emphasis).[10] On the other hand, Roland Polansky has argued that there is a practical argument at *EN* i 7 which does not rest on Aristotle's natural theories. He criticizes scholars such as Leunissen and Shields who think that Aristotle takes the *ergon* claim as an assumption by mistakenly reading the function argument against natural treatises. He complains that "These commentators overlook Aristotle's actual argument since they seek theoretical demonstration rather than the practical demonstration offered by Aristotle" (2017, 294, n. 34).

In contrast to the older commentators mentioned, I do not think that what we have here is an inductive or an analogical argument. Nor do I agree with scholars such as Polansky who consider it as a practical argument that does not rest on natural theories. I believe that Leunissen and Shields are right in associating the *ergon* argument with theories from natural treatises. Having said that, I believe that Aristotle does not merely assume but briefly argues for the *ergon* of human beings. On this point, I concur with Rachel Barney who suggests that Aristotle's text is more careful and more ambitious than presupposed by many scholars. She rightly points out that the instances of function Aristotle gives "are not induction-supporting, neither are they random. Rather they are closely related to the case of human beings in two different ways" (2008, 297). She thinks Aristotle is offering two distinct lines of argument for the human *ergon* which appeal to the distinctively human: 'the argument from the crafts' and 'the argument from the organic parts' (297). In her paper, she takes up the first one about the crafts and offers an idiosyncratic reading of this argument.[11]

[10] Some like Irwin 2002 and Whiting 1988 have defended the claim about human *ergon* on Aristotelian metaphysical and biological grounds. However, the dissatisfaction with the argument has led even these commentators to think that there is no argument at *EN* i 7 to show that man has an *ergon*.

[11] Barney thinks that due to methodological concerns Aristotle argues from "obvious facts about carpenters and shoemakers, eyes, hands, and feet" without wheeling in any external principles of natural teleology and she calls her strategy of interpretation as 'dialectical' (2008, 302-3). She offers two arguments for the argument from the crafts, one is the architectonic reading and the other the realization reading. She eventually concludes that "taking both readings together we can see Aristotle proposing that to make sense of these normative features of crafts (or presumably of any social function)

Aristotle has indeed a more ambitious argument here. *EN* i 7 is Aristotle's third *ergon* argument in his writings following different versions in the *Protrepticus* and *Eudemian Ethics.* To assume that there is no argument whatsoever here and that Aristotle merely mumbles awkwardly or speaks without following a certain line of reasoning seems unlikely for an argument reiterated for the third time. Especially given that the *ergon* argument follows immediately after Aristotle's lengthy and careful examination and criticism of the Platonic form of the good, this interpretation seems unconvincing.[12] In this section, I will take up what Barney calls 'the argument from the organic parts' which she didn't develop. I will try to show how we must understand this argument.

Here is once again the passage that argues from bodily parts to the *ergon* of man with an important line preceding it:

> Is he naturally (πέφυκεν) functionless (ἀργόν)? Or as eye, hand, foot, and in general each of the parts evidently has a function, may one lay it down that man similarly has a function apart from all these (παρὰ πάντα ταῦτα)? What then can this be? (*EN* 1097b30-33)

I suggest that we construe Aristotle's argument in the following way: The function of a bodily part can only be understood properly when its role in a functional whole that coordinates and integrates other functions is understood.[13] Let us set out in more detail

we need to see them as deriving their standing from natural teleology" (319). So, Barney seems to want both to have her cake and eat it. While she wants to keep natural teleology out of the picture initially, she wants to employ it eventually "to reasurre us that such functions are a natural phenomenon" (318).

[12] Lear 1988, 163 rightly points out that "It may at first seem odd to a modern reader to suppose that man has a function. And the inference - each of the parts of the body, eye, hand, and foot, has a function, therefore the whole man has a function - looks weak. If that argument provided the only reason for thinking that man has a function, Aristotle's ethics would rest on a shoddy foundation. But, as so often with Aristotle, we must look to his overall philosophical outlook to understand the argument in a particular passage."

[13] Tuozzo 1996, 148 has a similar reading, but his construal does not involve the 'coordinating' and 'integrating' aspects of the functional whole. I borrow these terms from Lennox 2010a.

this argument which, I submit, is not only consistent with but is an application of Aristotle's natural teleology.

As is well-known in *Phys.* ii 1 Aristotle differentiates things that exist by nature from the things that do not. Animals, plants, and simple bodies, i.e., the four elements, are said to exist by nature in the sense that they possess an internal principle of change and rest (192b9-14) and hence they are the sources of their own changes.[14] We are told that nature is twofold as natural things involve both material and formal natures, nevertheless, physical explanations need to refer to these natures. Aristotle argues that the formal nature of things is nature or substance, rather than their material nature "for a thing is more properly said to be what it is when it exists in actuality than when it exists potentially" (193b7-8). He thinks that it is because of a thing's form that its development follows certain stages, and it behaves in certain ways when it fully develops. He also thinks that "If a thing undergoes a continuous change toward some end, the last stage is actually that for the sake of which" (194a29-31) and nature is the end for the sake of which. This means that basically, the formal natures are teleological in character.

Now, in the case of natural substances such as plants and animals, Aristotle identifies their essence or formal nature with their soul (415b8-15). The soul is, in fact, the first actuality of a living body (412a19-20)[15] which consists in the vital capacities for nutrition, reproduction, perception, locomotion, and reason and different natural substances will possess different "hierarchically nested capacities for life".[16] The relation of formal nature with the material nature or bodily constituents can be elucidated in the light of two types of necessity Aristotle appears to hold.[17] In *Phys*. ii

[14] Cf. *GA* 735a3-5 and *Metaph*. 1015a13-19.
[15] Aristotle uses 'nature' (*phusis*), 'form' (*eidos*) and 'soul' (*psuchê*) interchangeably in the case of living beings.
[16] Leunissen 2015, 229.
[17] See *PA* 642a1-3: "Therefore there are these two causes, the cause for the sake of which and the cause from necessity."

3 Aristotle mentions first, a necessity in the matter[18] and second, what he calls hypothetical necessity which is commonly associated with teleological explanations. While as the material nature, necessity in the first sense is indispensable for things, it is primarily because of the end or goal that the things come into existence. The idea of hypothetical necessity is that something (in this case, a certain matter) is necessary 'on an assumption' (*ex hupotheseôs*) for an end, that is, if some goal is to be attained. This type of necessity occurs in natural beings as well as artefacts. A key passage from *Phys*. ii 9 reads as follows:

> Similarly in all other things which involve [an item that is] for the sake of which (τὸ ἕνεκά του): the product cannot come to be without things which have a necessary nature, but it is not due to these (except as its material); it comes to be for an end. For instance, why is a saw such as it is? To effect so-and-so and for the sake of so-and-so. This end [τοῦτο…τὸ οὗ ἕνεκα], however, cannot be realized unless the saw is made of iron. It is, therefore, necessary for it to be of iron, if we are to have a saw and perform the work (ἔργον) of sawing. What is necessary then, is necessary *on a hypothesis* (ἐξ ὑποθέσεως), not as an end (τέλος). Necessity is in the matter, while that for the sake of which (τὸ…οὗ ἕνεκα) is in the definition (ἐν τῷ λόγῳ). (*Phys*. 200a7-15, my emphasis, slightly modified)[19]

The *ergon* of the saw is sawing and thus, sawing is 'that for the sake of which' a saw has being. It is its end, and as such, its formal nature. In order to carry out its *ergon*, a

[18] This is often called 'Democritean', 'material' or 'simple' necessity in the literature. Aristotle famously criticizes those who believe 'material necessity' is adequate to account for natural phenomena in *Phys*. ii and not as Aristotle thinks, for the sake of something. Note that Aristotle does not think that material necessity is incompatible with teleology. See Gelber 2021, 9-13 for a discussion on 'necessity.'
[19] See also *PA* 639b26-30.

saw needs to be made of a hard material, in this case, it has to be made of iron. So, a certain type of matter, iron, is necessary conditional to a certain end, namely, sawing.[20]

Concerning the concept of *ergon* two things are worth noting in this passage: First, observe that Aristotle clearly identifies the ergon of a thing with 'that for the sake of which' (τὸ οὗ ἕνεκα) or the end of the thing. Second, the end of a thing is in the definition or in the account. Hence, it is what makes the thing what it is, namely, its essence. So, the *ergon* of a thing turns out to be the final cause of the thing and as such it gives the essence of the thing. As we will see these two aspects of *ergon* will be relevant also in later discussions.

Now hypothetical necessity which is commonly used with teleological explanations is the key to understanding the relation of the organic parts to the whole body and its form, namely, the soul. An important passage from *Parts of Animals* iv 10 is revealing to understand human beings:

> Mankind, however, instead of forelimbs and forefeet has arms and what are called hands. For it alone of the animals is upright, on account of the fact that its nature (φύσιν) and substantial being (οὐσίαν) are divine; and it is a work (ἔργον) of that which is most divine to understand (νοεῖν) and to think (φρονεῖν). But this is not easy when much of the body is pressing down from above since the weight makes the intellect and the common sense sluggish. For this reason, when their weight and bodily character becomes excessive, it is necessary that their bodies incline towards earth, so that for stability nature placed forefeet beneath the four-footed animals, instead of arms and hands. For it is necessary that all those able to walk should have two hind limbs, and such animals become four-footed because their soul is unable to bear the weight. (*PA* 686a25-b2, tr. Lennox)

[20] See Cooper 2004 for a comprehensive discussion on hypothetical necessity. See Stein 2016 for a recent discussion on it.

As we see here, the material nature and the essential nature of human beings are causally connected. Aristotle identifies the essential nature of human beings and then explains their upright posture as hypothetically necessary for their formal nature. The human being is divine and as a consequence of this divine nature, they engage in understanding and thought, i.e., they are rational. As a physiological precondition of this formal nature, human beings need arms and hands instead of forelimbs and forefeet and have an upright posture.[21] At *PA* 687a5-22, Aristotle criticizes Anaxagoras's explanation that man is the most intelligent of all animals because they possess hands. He reverses that explanation and in accordance with the hypothetical necessity he claims that "it is because they are the most intelligent that human beings are given hands," (*PA* 687a8-9) not the other way around.[22] He adds that "for the hands are instruments and nature, like an intelligent human being, always apportions each instrument to the one able to use it" (*PA* 687a11-13).[23] So, the characteristic form with

[21] Leunissen 2010 argues that natural treatises involve evidence for two different kinds of teleology which she calls 'primary' and 'secondary' teleology. She thinks that bodily parts that are the result of primary teleology are those necessary for performing essential functions. On the other hand, if a certain part is generated due to material necessity and is not indispensable from the perspective of the formal nature of the animal but exists "for the better" and "living well", then that part is not hypothetically necessary but due to material necessity and thus secondary teleology is the case. Her analysis evinces that hands are available for human beings given their particular substantial nature and hence are products of primary teleology. Being most intelligent is what distinguishes human beings from the other blooded live-bearing and land dwelling-animals and this explains why human beings have hands (47). István Bodnár in a private conversation objects to Leunissen's interpretation. He thinks that the lack of forefeet is the product of primary teleology. Instead, we have hands - because nature uses whatever is available for the best purpose, and additionally doesn't produce anything in vain. Hence we have instead of forefeet (the result of primary teleology) hands (nature using this organ in the best possible way). This means that some result of not primary teleology can also be linked to the particular substantial nature. In his review of Leunissen's book Henry 2011 criticizes Leunissen's strategy to make two exclusive and discrete categories of teleological causation on the grounds that there are also cases of tertiary teleology in Aristotle. He suggests that instead of making sharp divisions between 'kinds of teleology' it might be more correct to see those differences as a matter of degree. In any case, Bodnár and Henry's objections do not weaken the idea that human hands are necessary parts for performing essential functions and are due to hypothetical necessity.

[22] At *PA* 693b13-14 Aristotle says that "nature makes the organs for the *ergon*, and not the *ergon* for the organs." (τὰ γὰρ ὄργανα πρὸς τὸ ἔργον ἡ φύσις ποιεῖ, ἀλλ' οὐ τὸ ἔργον πρὸς τὰ ὄργανα.)

[23] As Pellegrin 2020, 81 observes according to the *Parts of Animals* "the hand is, in a way, many organs at the same time—talon, hoof, horn, spear, and sword (687b3)—and thus that Nature has provided human beings with a tool of survival that they can use, precisely because they are more intelligent than the other animals."

which the possession of hands is connected is intelligence (*phronêsis*). However, even though he thinks that only human beings can partake of understanding and thought among other mortal animals, we should bear in mind that for Aristotle we are not the only animal that is practically intelligent, but rather we are the most intelligent of all animals (*phronimôtaton tôn zôiôn*).[24]

That said, the question of why Aristotle thinks the human body must necessarily be arranged in this way is still not clear. Aristotle does not explain it further other than relating upright posture and possession of hands with the formal capacities of understanding and thought. Yet, we can draw on his discussions in *De Anima* to conjecture what he might have in mind.[25] The explanation must have to do with the location of the organ of the heart in the body. For Aristotle, the animal heart is the seat of *phantastikon*, i.e., imagination. He thinks that in the case of human beings, *phantasmata*, the mental images are the precondition of understanding[26] and since the heart is the organ correlated to it, too much weight shouldn't press on the heart otherwise *phantastikon* will not be able to perform its operation.[27] Consequently, since understanding and thought depend on *phantasmata* as a precondition, they will be impeded, too. A bulky body with a bulky upper part will incline towards the ground which explains why animals with such bulky bodies have four feet. Humans, however, have a lighter upper body and two feet and an upright position. All this physiological arrangement must be in place so that human beings can realize the soul

[24] Although Aristotle constantly and consistently speaks about the wisdom, intelligence, and skills animals exhibit in the activities correlated with their ways of life, those cognitive capacities appear to be only analogous to "art, wisdom and intelligence in mankind" (*HA* 588a29-31). See also Coles 1997 on Aristotle's view on animal '*phronêsis*.'

[25] I owe this point to Kietzmann 2019, 33.

[26] Other animals don't have understanding but only something analogous to it (*HA* 588a29-31). Nevertheless, their cognitive operations take place in their heart, the primary organ of sense perception.

[27] Aristotle says on more than one occasion that we "never understand without *phantasmata*" because "the *noêtikon* understands the forms in *phantasmata*." (*DA* 431a14-18; 431b3-4, 432a9-10)

capacities of understanding and thought, which is their formal nature and as such render them divine.[28]

The two observations we made about the concept of *ergon* in the previous passage can also be made here. The *ergon* of human beings is associated with the activities of understanding and thinking, i.e., rational activity, which is the end that causally explains why human bodily parts have certain *erga* and characteristics. And, as their end or final cause, the human *ergon* which lies in rational activity is intimately tied or connected to essence.

In *PA* i 5 where Aristotle investigates causal explanations in animals, he makes a similar point between the *erga* of bodily parts and the *ergon* of the whole animal.[29] The passage is of great importance for our purpose as it is also quite similar to the *ergon* argument at *EN* i 7:

> Since every instrument (ὄργανον) is for the sake of something (ἕνεκά του), and each of the parts of the body is for the sake of a certain action (πρᾶξίς τις), it is apparent that the whole body too has been constituted for the sake of a certain *manifold action* (πράξεώς τινος ἕνεκα πολυμεροῦς) ... So, the body too is in a way for the sake of the soul, and the parts are for the sake of the functions (ἔργων) in relation to which each of them has naturally developed (πέφυκεν). (*PA* 645b14–20, tr. Lennox 2002 my emphasis)[30]

Here Aristotle more explicitly and strongly argues from the *erga* of bodily parts which are certain activities to the existence of the *ergon* of the whole animal which is a certain 'complete' or 'manifold' action. So, not only do the constitutive organic parts of the animals have their specific *erga* which are their ends and final causes—as he thinks

[28] See Gregoric 2005 on human posture in Aristotle and Plato.

[29] See Witt 2004, 124: "What Aristotle says about the parts of organisms, that they are defined by their functions, is also true of whole organisms…Form is a functional principle of species identification; what a thing is, for Aristotle, is determined by what it can do (and not, for example, by its morphology or reproductive history)."

[30] See Leunissen 2015, 229-230 whose analysis of this passage agrees with the reading advanced here.

that "nature makes the organs for the functions" (*PA* 694b13)—but the whole natural organism has also its specific *ergon* apart from the subordinate *erga* of those parts.[31] It must be noted that the whole living body has a function over and above the functional capacities of bodily parts. That must be what he suggests by using the term *plerous* which means full, complete, or whole. In this sense, Balme is right in thinking that at 645b17 Aristotle refers to "complete and comprehensive, i.e., the coordinated activity of the animal as a whole organism, not merely the aggregation of the activities of the parts." (1972, 124) So read, *praxis…plêrês* is a "complete" function which is an integrated function over and above the subordinate functions of the parts of the body (recall '*παρὰ πάντα ταῦτα*' in *EN* i 7.1097b33). Since the relation between subordinate functions of the bodily parts and the 'complete' function or activity of the whole body is teleological, the former functions have to culminate either in one or several functions. When it should be construed as 'several functions' then the only sense in which the body as a whole could be said to have a single function is in an 'inclusivist" sense. Only if it is taken as a 'single' function then there is a teleological non-vacuous sense of 'for the sake of which' between subordinate functions and the 'complete' function.[32]

Note that the relationship between the bodily parts and the whole living and organic body is an essential relationship in the sense that the bodily parts cannot exist and perform their *erga* outside the body. Aristotle thinks that like everything else, the bodily parts are also defined by their *erga*, and they will cease to exist outside the body as they will cease to perform their defining work and capacity. In the passages below

[31] Aristotle seems to have a symmetrical teleological relationship between activities and body parts as we read in this passage: "Now where activities are for the sake of other activities, clearly the things of which they are the activities stand to each other in the same way as the activities do (*PA* 645b28-30; I owe this passage to Tuozzo 1996, 149).

[32] See Tuozzo 1996, 149 who also construes 'complete' in the sense taken here.

Aristotle emphasizes that when a part is not capable of performing its relevant work, it will be only homonymously what it is in the organism[33]:

> What a thing is is always determined by its *ergon*: a thing really is itself when it can perform its *ergon*; an eye, for instance, when it can see. When a thing cannot do so it is that thing only in name, like a dead eye or one made of stone, just as a wooden saw is no more a saw than one in a picture. (*Mete*. 390a10-13)

> If the whole body be destroyed, there will be no foot or hand, except homonymously, as we might speak of a stone hand; for when destroyed the hand will be no better than that. But things are defined by their work and power; and we ought not to say that they are the same when they no longer have their proper quality, but only that they are homonymous. (*Pol*. 1253a21-25)[34]

The organic parts of natural bodies can only retain their work within the specifically organized whole which itself has a defining *ergon*. On the other hand, the parts in artificial things are incidentally related to specific wholes. The parts of an artificial whole can be separated from it and reintegrated into another such whole. The configuration of an artificial part is accidental to what the part is. That's why in the *Metaphysics* the things by nature are said to be wholes in a higher degree than things by art (1023b34–35). The natural thing possesses its principle of change within itself and as such organizes and shapes itself and coordinates its parts from within.

> The fittest mode, then, of treatment is to say, a man has such and such parts, because the essence of man is such and such, and because they are necessary conditions of his existence, or, if we cannot quite say this then the next thing to

[33] According to *Categories* 1a1-3: "When things have only a name in common and the definition of being which corresponds to the name is different, they are called *homonymous*."
[34] See also *PA* 640b35-641a2; *GA* 726b22-24, 734b24-27; *DA* 412b18-22.

> it, namely, that it is either quite impossible for a man to exist without them, or, at any rate, that it is good that they should be there. (*PA*, 640a33-640b1)

Here Aristotle says that human beings have certain organic parts they have in connection to their essential nature which organizes and integrates us in a specific way and configuration. The parts are necessary conditions of our existence and yet it is the whole or the *ergon* of the whole that arranges the body and its parts in the way we are now (*DA* 412a20–412b7).[35]

3.3. Living beings and their self-regarding *erga*

Today many scholars resist the idea that natural teleology figures in the *ergon* argument at *EN* i 7 and they deny that the concept of *ergon* in which human good resides is a theoretical concept connected to its use in the natural treatises. Their resistance seems to rest on the conviction that we should not attribute functions to the entire living beings including humans since something can have a function only if it acts instrumentally as part of a larger whole. And because they are convinced that Aristotle's theory does not allow such a portrayal, they propose that we should understand the human *ergon* at *EN* i 7 rather in a 'loose' or 'rhetorical' way.[36]

In the previous section, I have suggested that it stands to reason to understand the concept of human *ergon* used in *EN* i 7 as indeed a theoretical concept that is to be

[35] See Charlton 1992, 103 in support of the thesis of this section about parts and wholes.

[36] David Bostock asserts that "the well-known claim of *Nicomachean Ethics* i 7 that man has a 'function' (and the good man is one who performs that function well, 1097b24-33), is at best misleadingly expressed" (2006, 88, n. 21). Bostock assumes that an *ergon* can properly be attributed only to the instruments as they are useful for further ends. Since living beings such as animals and plants are not for the sake of a further end, they cannot have an *ergon* (88). Martha Nussbaum similarly argues that something can have an *ergon* only if it acts as a part of a larger system. And because Aristotle's theory does not ascribe such a role to animals and plants, they cannot have an *ergon*. Hence, she concludes that the *ergon* ascribed to human beings in *EN* i 7 should be treated with caution. In her view Aristotle makes a loose analogy and he only considers it to refer to a characteristic or distinctive activity (1978, 81-5). In a similar line of reasoning, more recently Roland Polansky has asserted that Aristotle mentions the *ergon* of a whole living being only in practical contexts because whole organisms do not in fact have an *ergon* in theoretical treatises (2017, 292-295, esp. n.33).

understood against the background of Aristotle's theoretical philosophy. In this section, I will assuage the worry that is associated with a theoretical concept of human *ergon*. I will argue that Aristotle has a non-homonymous conception of an *ergon* which is identified with the end or the final cause and as such, the essence of the thing. This conception of *ergon* applies both to bodily parts and organs as well as whole living beings in the same way. However, I will argue that while bodily parts and man-made instruments or tools have an other-regarding nature, the whole living beings such as plants and animals have a self-regarding nature and we need to understand their *erga* accordingly. Consequently, as a kind of living being, human beings should be understood to have a self-regarding *ergon* which as their final cause manifests what is good and beneficial for them. Hence, we should avoid thinking of humans on analogy with their bodily parts, whose being and good is intelligible only in the context of the whole organism.

Recall that in the first section, we made two observations about the concept of *ergon* when we examined the relation of bodily parts to the whole living beings. First, we noted that Aristotle identifies the *ergon* of a thing with 'that for the sake of which' (*to hou heneka*) or the 'end' of the thing. Second, as the end or the final cause, the *ergon* of a thing gives the essence of the thing. Aristotle is indeed committed to both claims associated with the *ergon* of an item and this view is fundamental to his network of convictions concerning the nature of things. Regarding the claim that the *ergon* of a thing is identified with its end or final cause, in the *De Caelo* we read that "each of the things that has an *ergon* is for the sake of the *ergon*" (286a8-9). Again, in the *Metaphysics* Aristotle tells us that "the *ergon* of each thing is its end" (996b7). Sometimes Aristotle reverses that statement and for instance, in the *Eudemian Ethics* says that "the end of each thing is its *ergon*" (1219a8). Similarly in the *Politics* when Aristotle writes that "when one thing is for the sake of another…I mean, for example, every instrument in

relation to the *ergon* that comes about…" (1328a28-31), the *ergon* of instruments is identified with the end or final cause of the instruments.[37]

Regarding the second claim that suggests that as the end or the final cause, the *ergon* of a thing gives the essence or the formal cause of the thing, we can consider Aristotle's ubiquitous statement that identifies final, formal, and efficient causes. In *Physics* ii 7, in one of those well-known passages, Aristotle states that "three [types of causes] often converge upon one thing: the what-is-it and the for-the-sake-of-which are one, and the primary source of change is one in kind with these, for a man generates a man" (198a24-7) (Cf. also *GA* 715a4-11; *Metaph*. 1044a32-b1; *DA* 415b8-12; and also, *Oec*. 1343a12-14). Aristotle often phrases the essence or the formal cause with 'the what is it' (*to ti esti*), 'what it is to be [the thing]' (*to ti ên einai*), and 'the being' (or substance - *hê ousia*). In the *Physics* passage 'the what-is-it' thus, refers to the formal cause and we are told that it is the same with the 'for-the-sake-of-which', i.e., the final cause as well as being the same in species with the moving cause, which is the primary source of the change. The nature of the convergence of these three causes is a controversial matter which does not concern us here. For our purpose it suffices to see that besides the efficient cause, Aristotle identifies the essence or the formal cause with the end or the final cause of the thing.[38] And together with our previous observation that the *ergon* of things is their final cause, we can draw the inference that the *ergon* of things also exhibits the form or the essence of the things.

The foregoing suggests that Aristotle's association of the concept of *ergon* with both a final and a formal cause applies indiscriminately to all items. Now I want to argue that in contrast to bodily parts and man-made instruments, which have other-

[37] Cf. also *PA* 662a16-18 and *Somn* 455b22-5.

[38] The formal cause of the things is the capacity or the set of capacities which enable the living being to perform the activities constitutive of its end. So, the formal cause is with a reference to the end of the living being. See Rosen 2014, who makes a thorough examination of this and similar passages with regard to the 'sameness' or 'convergence' claim pertaining to the three causes.

regarding natures, living beings have self-regarding natures and hence their *erga* similarly need to be understood as self-regarding.

A thing with an other-regarding nature can simply be considered as that which exists instrumentally for the sake of a further thing. This description holds trivially for the artificial tools and organic parts as we already discussed to some extent in the previous section. Due to their specific nature both artificial tools and organic parts are linked to things external to themselves and their well-functioning instrumentally contributes to the well-functioning of those other things. If they are in good condition, the things to which they are attached or related will also be in a better condition. And if they are in a bad condition there will be a similar correlation. If we consider the organic parts, their *erga* rest on the *ergon* of the whole organism, otherwise, they would not have an *ergon* in the first place. As Aristotle remarks, "if the whole body is destroyed, there will be no foot or hand, except homonymously, as we might speak of a stone hand" (*Pol*. 1252a21-22).

We can find numerous passages in the zoological writings in which the other-regarding nature of the organic parts is implicated. For example, in the *Generation of Animals* Aristotle often mentions how nature (in the sense of nature of the individual organisms) creates parts or organs of the animal at the proper time when the animal can use the part or the organ. It is said to be neither too early nor too late for the animal to be able to use them (*GA* 743b32-744b11). Again, when he proposes a causal explanation for the strange 'nose' (the trunk) that the elephant has, he argues that the elephant needs this long trunk because it uses it to breathe air while seeking nourishment in the water (*PA* 659a20). Also, Aristotle's remarks about human hands are well-known. As the most intelligent animal humans have hands because the most intelligent animal would use the greatest number of instruments well. The human hand is said to be not only one instrument but many as it is an instrument for instruments (*PA* 687a8-23). In this context, it is not a coincidence that both the instrument and the organ are called *organon* in Greek and this seems to be one of the

cases where Aristotle's convictions are in line with linguistic usage. He holds that *organon* is used in the same way in two different contexts non-homonymously. So, as these examples also attest both artificial instruments and organic parts have other regarding *erga* and thus, are for the sake of further purposes or good.

That said, it doesn't stand to reason to think that not only instruments and bodily parts but all (embodied) entities that exist have an other-regarding nature or *ergon* in this sense. If that were the case, we would end up having an infinite regress. Thus, if we do not stop the progression of the things that have an other-regarding *ergon*, it will have the danger of going to some larger whole, perhaps even all the way to the whole of the cosmos. In order to avoid the regress, we will need to identify certain things that have a self-regarding nature. At this point, however, the crucial question to be answered is where we are going to locate the self-regarding natures which will stop the regress. I believe that a very sensible view points in the direction of the whole living beings as things with a self-regarding nature or *ergon*. This is suggested by how Aristotle portrays the *erga* of living beings in the following passage:

> So that first it is necessary to discuss nourishment and reproduction, for the nutritive soul also belongs to the other [living things], and is the first and most common capacity of soul, by virtue of which life belongs to them all, the functions (ἔργα) of which are to reproduce and to make use of nourishment. For most natural of the functions (ἔργων) in living things, as many as are complete and neither deformed nor generated spontaneously, is the production of another like itself, an animal an animal, a plant a plant. (*DA* ii 4.415a22-29, tr. Lennox 2023)[39]

As mentioned before, the soul is the form of living beings[40] and as such it comprises various *erga* such as nutrition, perception and thinking. In this passage in *DA* ii 4

[39] As a parallel passage see *GA* ii 4.740b25-741a3.

[40] *DA* 415b8-12: "The soul is the cause and principle of the living body. As these things are spoken of in many ways, so the soul is spoken of as a cause in the three of the ways delineated: for the soul is a cause

where Aristotle has just started out his substantive inquiry about the soul and its various aspects, he mentions the most fundamental *erga* which are common to all living beings. The twin *erga* of nutrition and reproduction which are in fact embedded in the nutritive soul are depicted as the 'most natural' *erga*. The passage suggests that the most fundamental and common *erga* of all living beings are indeed self-regarding. By nutrition and reproduction living beings strive for self-preservation. He immediately moves on to add that by reproductive activities they "participate, insofar as they are able, in the always and the divine; for all [perfect living things] strive for this and do whatever they do in accordance with nature for the sake of this[41] (but that for the sake of which is twofold, the *of* which (τὸ μὲν οὗ), and the *for* which (τὸ δὲ ᾧ)" (415a29-415b2). Here Aristotle is claiming that reproduction and whatever else living beings do is for the sake of partaking in the eternal and the divine. As James Lennox notes the scope of "whatever they do" should be understood quite broadly including perceptual activities, locomotive activities and behaviour related to reproduction are all related with the goal of preservation of life (unpublished, 23).[42]

Although Aristotle himself does not clarify what he means by his distinction pertaining to 'that for the sake of which' in this passage, scholars widely agree that *hou heneka* + genitive refers to an end, objective or goal and *hou heneka* + dative refers to a beneficiary, that is, that for whose good something occurs or exists.[43] While by nourishment and generating another like themselves living beings strive to partake in the eternal and the divine, it is evident that this end operates as the first type of 'that for the sake of' (τὸ…οὗ). Whether the other way of being for the sake of something applies here is not clear, though. By their reproductive activities do living beings also

as the source of motion, as that for the sake of which, and as the substance of ensouled bodies" (tr. Shields)

[41] See also *GA* 731b24-732a1. Cf. *Symposium* 207a-e; *Laws* 721b-c on the association of the reproductive activities of living beings with their desire to be immortal.

[42] Cf. *Pol.* 1252a26-34 about the natural union of female and male for the sake of generation.

[43] For a comprehensive survey of the related literature and discussion about two ways of being 'the for the sake of which' see Gelber 2018.

benefit what is divine and eternal? I think those who deny it are right. Aristotle would not allow thinking of eternality (or participating in eternality) to be a beneficiary of whatever living organisms do. At the same time when we deny that the nutritive soul and its functions are for the sake of benefitting the divine and the eternal, we should not be tempted to think that as far as the context of this passage is concerned, the living thing would be mentioned as a beneficiary. Evidently, the end mentioned here is participating in the eternal and the divine, and not the living beings themselves. Nevertheless, there is a restricted function of this nutritive soul, where the living being itself is the beneficiary:

> For the ensouled thing preserves its being and exists so long as it is nourished; and it is capable of generating not the very thing that is nourished, but rather something like what is nourished, since its being already is, and nothing reproduces its very self, but preserves it. (*DA* ii 4.416b14-18, tr. Lennox 2023)

As this passage clearly states the nutritive soul accomplishes the preservation of the being of the living thing itself. Insofar as the preservation of life is the end, the beneficiary is the living being itself.[44]

Aristotle at least for the case of plants also sets out that "of the being of the plants, there is no other *ergon* and no other action (οὐθέν ἐστιν ἄλλο ἔργον οὐδὲ πρᾶξις οὐδεμία) than the generation of seed" (*GA* 731a24-27). Plants live a life of self-preservation, generation, and growth and this is their *ergon* whereas for the animals "generation is not the only *ergon*…but all animals partake also of some sort of knowledge—some of more, some of less, some of very little indeed. For they have sense-perception, and this is a kind of knowledge" (731a29-33). The issue here can be whether functions provided by these further capacities or faculties are also self-regarding. Similarly, in the case of human beings, to which we will return more

[44] Johnson 2005, 69 and Frey 2015, 144 rightly think that the beneficiary is indeed the living being itself but they derive this conclusion from the cryptic remark mentioning the two different ways of being for the sake of which. However, this is not the point of this obscure remark.

extensively in the next section, are those living beings who also have intellect and hence live a rational life that displays their *ergon*.[45]

Aristotle in fact contends that there is a sort of hierarchy between the soul capacities of living beings, each capacity presupposing the lower-level capacities beneath it. The nutritive and reproductive soul is common to all of them as we already mentioned. Animals have both the nutritive and the perceptive soul whereas humans have also rational soul in addition to the former two. Among those souls, the earlier types are potentially present in the later ones (*DA* 414b31). For our purpose especially the nutritive soul is worth stressing. So, the nutritive and reproductive soul that is 'the first and most common' capacity of all living beings and that aims at preserving their being is embedded in and is potentially present in the perceptive soul of the animals (*DA* 414b32). While the nutritive soul exists separately in plants "the perceptive soul is not without the nutritive soul" (415a1-2). Finally, "among perishable things, to those to which reasoning belongs all the remaining capacities also belong" (415a8-9). Hence, the nutritive and the reproductive soul is potentially present in the intellective soul of humans (*DA* 415a7-9) as well as other capacities such as perceptive and desiderative soul.

Note once again that in all those species of living beings that we mentioned their *ergon* which is their final cause reveals what is good for them as a species. Aristotle is very clear that "the end should not be just any last thing, but the best (*Phys*. 194a28).[46] This ultimate end which refers to a certain way of life for different species is unconditionally or categorically (*haplôs*) good for all the well-developed members of

[45] Humans have the capacity for choice and deliberation which are prerequisites for practical excellence (*EN* 1111b6-10, 1147b3-5, 1149b31-1150a1) and intellect (*nous*) which is necessary for engaging in theoretical contemplation (*EN* 1178b25-32).

[46] For Aristotle's association of the final cause with the good of the living being see also *Phys*. 198b4-9; *Metaph*. 983a30-b1; 1013b25-27.

those species.[47] So, also for human beings there will be an unconditional good that is good for all well-developed members regardless of their actual desires or interest.[48]

To conclude this section, just like their organic parts (and other artificial instruments) the whole living beings have indeed their specific *erga* which as ends are embedded in their essence or form. A passage in the *De Anima* is suggestive of this analogy between parts and whole living beings in connection to their *erga*:

> What has been said in the case of parts must of course be understood as applying to the entire living body. For there is an analogy: as one part is to one part, so the whole perceptual faculty is to the whole of the body, which is capable of perception, insofar as it is capable of perception. (*DA* 412b22-25, tr. by Shields)[49]

As we have already mentioned in some detail in the first section by drawing on various passages about parts and wholes, Aristotle contends that the natural *ergon* of a whole living organism is over and above the *erga* of its parts (*PA* 642a11-2; 645b14-20; *EN* 1097b32: *para panta tauta*). What we have discussed in this section adds to that claim that there is nothing over and above the *ergon* of a living organism which displays its defining form. The non-human animal is a perceiving body and there is nothing over and above the specific capacities for its being that would also be part of the constitution of the animal. The non-human animal soul as a unity is composed of a set of capacities such as nutritive, reproductive, desiderative and the perceptive soul. Nevertheless, because perception is the higher soul capacity, all the other ones are potentially present in perception and that complex provides the defining complex

[47] So, if Aristotle thinks that there are certain members of any species that may be defective in nature those categorical goods may not be good for them.

[48] See e.g., *EN* 1152b26-27, 1155b23-27; *EE* 1235b30-34, 1228b18-22 for a distinction between unconditional (*haplôs*) goods and conditional (subject dependent or subjective) goods (*tini*).

[49] The claim is formulated in terms of a proportion (*analogia*), in the form of a: b :: c : d.

ergon of it. It presupposes all the lower capacities and there is nothing over and above this *ergon* that would also belong to the constitution of the animal.

Therefore, Aristotle does not think that the *ergon* of the whole living organism is analogous to the *erga* of its organic parts in the sense of providing some good for a further beneficiary. Due to their specific nature, the whole living beings have self-regarding *erga* while organic parts are other regarding in the sense that they function for the sake of the whole organism without which they cannot be what they are in the first place, except homonymously.[50]

3.4. Natural teleology and the human good

In this final section, I will argue that the fact that human beings rarely exhibit their *ergon* to the fullest degree and thus fail to become ubiquitously good and happy shows that natural teleology which operates more strictly and determinatively in the case of other living beings does not determine human beings in the same strict way.[51] I will also show how Aristotle manages to explain this tension between his teleology and the human condition by drawing on his natural teleology which nevertheless corroborates further the claim of this chapter that natural teleology figures in the *ergon* argument and Aristotle's practical philosophy.

In *Phys.* ii 8 Aristotle argues that the regularity in nature cannot be an outcome of material necessity by contingent factors but has to be the outcome of phenomena occurring for the sake of ends which are tied to the form of the things. Natural things or phenomena occur either always or for the most part 'for' something (198b36-38). However, the natural motion of things towards their ends does not occur flawlessly (199a33). Things might go wrong in nature and the achievement of the ends might be

[50] Note that a living being can be part of the habitat of another living being (as food, or in some other way) But in cases like this, the activity of those specimens that are part of such habitat is not different from the activity of those that aren't (or that are embedded in other habitats, in habitats of other living beings). So in that sense, the life of these specimens is not under the sway of those living beings in whose habitats they are present.

[51] See Frede 2019 for an illuminating discussion with the same conclusion.

interrupted because of some impediments. As Aristotle points out, "each principle gives rise, not to the same thing in all cases, nor to any chance thing, but always to something proceeding towards the same thing, if there is no impediment" (199b15-18).[52] However, when it comes to human beings, who also as natural beings possess an internal principle of change and rest within themselves, things get slightly complicated. Due to their proper *ergon* human beings seem to present a special case as they can commonly perform their defining *ergon* only to some limited degree by nature. We need to return to the *ergon* argument to explain this observation.

In *EN* i 7 after Aristotle argues for the claim that human beings have an *ergon*, following a *scala naturae*[53] familiar from his natural philosophy Aristotle sets out to identify what the human *ergon* is by eliminating one by one the soul capacities that human beings share with plants and non-human animals (*EN* 1097b31- 1098a4).[54] With an analysis that shows a close affinity with his psychological theory in *DA* ii 2, Aristotle argues that what is *idion* of the human soul cannot be the nutritive capacity as it shares it with plants.[55] Nor is it the perceptive or sensitive soul because animals

[52] The question of how we should understand the natural regularity that is expressed with holding either always or for the most part is not immediately clear and thus is a matter of debate among scholars. For different versions of statistical or normative interpretations see Judson 1991, Nielsen 2008, and Irwin 2000. In this section I will presuppose Judson's conditional frequency interpretation as the right view. Judson argues that there are two types of frequency-judgement that can be connected with Aristotle's use of always, for the most part or rarely. One is absolute frequency and the other is conditional frequency. In the case of judgements of absolute frequency, to say that an event happens always, for the most part or rarely will mean that events of this type happen *all the time*, or *most of the time* or neither. So, in this type of frequency 'always' etc. are considered as quantifiers ranging over periods or instants of time. In the case of conditional frequency, ordered pairs of events are in question and the temporal adverbials range over number of cases instead of points in time: E_1 is usual/rare relative to E_2 iff E_2 is usually/rarely accompanied by E_1. In this type of frequency, 'always' etc. range over certain cases, i.e., over cases in which E_2 occurs. Judson persuasively argues against absolute frequency view in favor of a conditional reading. For a discussion of statistical and normative interpretations of either always or for the most part and a defence of Judson's conditional frequency view against normative interpretations of Nielsen and Irwin see Karbowski 2012.

[53] See *GA* ii 3. 736a24-737b6 for the same sequence of soul functions in the context of how embryos acquire their soul. See Leunissen 2018 for a discussion on "Order and Method in Aristotle's Generation of Animals."

[54] It might be worth noting that the *EE ergon* argument does not appeal to the *scala naturae*.

[55] Translating that term into peculiar (in the sense of unique) might not be apt. Aristotle seems to be using the term ἴδιον here in the sense of what is essential to human beings rather than what is necessary but non-essential (*proprium*). If it were a *proprium* then it couldn't be part of what it is to be human. But

possess this capacity, too. In conclusion Aristotle states that 'an active life of the element that has a rational principle' (1098a3-4: πρακτική τις τοῦ λόγον ἔχοντος) is the human *ergon* which is their defining capacity. He adds that "of this [the element that has reason], one part has such a principle in the sense of being obedient to one, the other in the sense of possessing one and exercising thought" (1098a4-5).

As we have seen in the second section, Aristotle identifies the *ergon* of a thing with its end or final cause which also gives the essence of the thing. So, what the *ergon* argument establishes is that human defining capacity or essence is a capacity for "an activity of soul in accordance with, or not without, rational principle" (1098a7-8) which suggests that what is capable of this 'logos-based' or 'reason-based'[56] activity is what is constitutive of human form or nature.[57] As Aristotle points out elsewhere, "the virtue of each thing is relative to its *ergon*, specifically, to its proper *ergon* (τὸ ἔργον τὸ οἰκεῖον: which is tied to its essence) (*EN* 1139a16-17).[58] So, as the good or well of man resides in his *ergon*, the good of man has to be the activity of his rational soul in accordance with excellence which we later learn that consists in excellent practical and theoretical activities, that is, virtuous activity and contemplation.[59]

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contemplation is, so it cannot be just a *proprium*. See Whiting 1988, 37, who argues that since in the function argument Aristotle "talks exclusively about activities (especially rational activities) of the human soul" and since "Aristotle takes the soul of an organism to be its essence and not one of its necessary but non-essential properties" he seems to be using *idios* to refer to what is essential here.

[56] I borrow the term from Achtenberg 2002.

[57] See *Pol*. 1334b14: "reason (λόγος) and understanding (νοῦς) is the end of our nature.

[58] See *EN* 1176a3-5 for the idea that each creature has by nature a 'proper' *ergon* and 'proper' pleasure related to it. Cf. also *EN* 1178a5-6, 1099b21-2, 1170a13-16, 1170b1-2, 1147a24-25, 1147b6-17 1167b29, 1174b2-5, 1097b11, 1153a13-14, 1154b7-9, 1097b30 where Aristotle appeals to nature and/or natural philosophy in his discussions.

[59] Some scholars conflate the Platonic account of *ergon* with Aristotle's. E.g., Polansky 2017 writes "Generally, functions for species are problematic if species are distinguished by having features "more or less" (see Henry 2015, 172 and Witt 2015, 280), for "more or less" sits poorly with the notion of *function as what something alone can do or does best*." (292-293, n.33, my emphasis) However, this is the Platonic account of *ergon* in *Rep*. 352d9-e4. As Baker 2015's comprehensive work evinces, for Plato the *ergon* of X is what X can achieve best and the "the notion of 'best' is with respect to a comparison class of things that can achieve similar *erga*." In Aristotle "the *ergon* of X is the end that is best in the sense of being the last thing for the sake of which everything else is or is done". Here, "the comparison class is with respect to other things that an X, qua X, can achieve, and the way that one of these things is best

In the *ergon* argument Aristotle makes an important remark about the *ergon* of a 'good' human being as his end. He states that "the *ergon* of anything is the same in kind as that of a good thing of the same type as in the case of a lyre-player and a good lyre-player" (1098a9-10). Put more formally, this indicates that the '*ergon*' of an X and the '*ergon*' of a good X is the same in kind. In other words, a thing does not change its defining power when it performs that same *ergon* well. When a thing of a certain type becomes excellent or virtuous, that thing does not acquire a different *ergon* than the *ergon* the thing already had. For instance, even though he might not be playing the lyre in the best way, someone that plays the lyre performs the same *ergon*, i.e., the activity of playing lyre, as, say, a lyre virtuoso. The idea of preserving the same *ergon* when the thing achieves its excellence makes sense and is compatible with what Aristotle consistently points out elsewhere. For instance, he says that "virtue is a completion, for when anything acquires its proper virtue, we call it complete, since it is then really in its natural state" (*Phys*. 246a10-17). We observe Aristotle's commitment to the same view in a passage in the *Protrepticus*, one of his earliest works. There he says that "when the natural *ergon* of each thing is brought to completion and is said to be most beautiful not by coincidence but by itself, that is when one should say that it is good" (*Protr*. 42, 5-7).[60]

I derive from this discussion the following idea. The fact that a thing has not achieved its excellence yet does not imply that the thing lacks that power or *ergon*.[61] If being an excellent version of a kind requires bringing the defining *ergon* of that kind to completion, excellence or virtue presupposes the presence or exercise of that defining *ergon* to some degree in the first place. To return to human beings, although

is by being the last thing for the sake of which." (242) Cf. Achtenberg 1992, 329 and Charlton 1992, 102-103 for similar observations.

[60] Translated by Hutchinson and Johnson, slightly modified.

[61] I don't claim that Aristotle considers human beings as defective natural beings. Nor do I claim that virtues should be understood in a remedial sense in which they are meant to correct or ameliorate a defective human nature. See Gottlieb 2009, chapter 3 as a comprehensive discussion of a non-remedial conception of virtue and Frede 2019 for a similar line of thought in a wider framework of the *polis*.

human *ergon* consists in activity with logos which translates into various reason-based actions (both theoretical and practical) that human being can choose to perform, a human being cannot choose to lead a merely natural life as other animals. "The other animals live most of all by nature, but some also to a small degree by habit, but human being lives also by *logos* (for human being alone has *logos*)" (*Pol*. 1332b3). Human beings in fact do things that plants and other non-human animals do, however those activities and functions shared with other organisms are informed by reason and hence transformed in our case.[62] All our choices and actions are shaped by our human form, namely, logos. This is in fact what distinguishes human actions from mere animal behaviour. We are so constituted that we cannot but develop and perform the power for reason-based actions (Cf. *EE* 1224b29-30). In *De Interpretatione* i Aristotle argues that even by speaking, human beings exercise their theoretical abilities because spoken words are considered to be symbols for thought. So, performing their defining *ergon*, i.e., logos, the power that is ingrained in their constitution is inescapable for human beings. Reason-based activity is supported by and intimately connected to our biological constitution.[63] That's why Aristotle indicates that reason sets in naturally at a certain age (*EN* 1143b6-8).[64]

Therefore, Aristotle seems to be committed to the view that performing human *ergon* which consists in reason-based activity is not something that human beings can intentionally choose or opt for. Human beings always already exhibit rational activity ubiquitously unless their natural development is stunted (*EE* 1224b29-30). That said, performing human *ergon* well, i.e., to perform the defining human capacity to the

[62] See Nagel 1980, 10 f. and Rabbås 2015, 100 on this point.

[63] Rabbås 2015 puts it very nicely: "A substance cannot 'opt for' its form, that is, settle whether it is to perform its *ergon* and thereby actualize its form, for that would mean that it could choose to exist, which is absurd. What it can do, however, is to settle how (in what way, when, where, etc.) it is to do so…Thus, human beings cannot choose whether they should be rationally active, for that is their form: in so far as they are human, that is, exist (are alive), they simply are rationally active. To think that they could choose to be rationally active would be to introduce an ontological gap between being human and doing the thing that constitutes our form and essence qua human, and thus to imply that they could choose to be human, that is, to exist" (107-108).

[64] See Frede, 2019, 260 in support of this point.

fullest degree and hence become a complete and excellent human being depends on the absence of some natural impediments, some external enabling conditions that have an impact on human choice. Whereas the phenomenon of exhibiting their constitutive *ergon* to some degree is inescapable and widespread, Aristotle reiterates time and again that completion of their defining *ergon* is quite rare among human beings.

Part of the difficulty in achieving the human end is that this end consists in demanding theoretical and practical activities. *Theôria* or contemplation which is the excellence of the scientific part (*epistêmonikon*) of the rational soul lies in grasping the most exalted intelligible objects. Excellence in practical activities requires excellence of non-rational soul and the excellence of the calculative (*logistikon*) part of the rational soul. Both excellences which together underwrite the completion of the human *ergon* are quite hard and demanding tasks. Although Aristotle is an optimist[65] and in principle believes that it is possible for human beings to achieve their end, he thinks performing human *ergon* well is very difficult to accomplish and thus is rare among human beings (*EN* 1109a24-26). We can find passages that confirm this view in both theoretical and practical writings. In *Metaphysics* i Aristotle states that the exercise of the "science that investigates first principles and causes" (982b9) might be beyond human power since "in many ways human nature is in bondage" (982b29-30). He sounds very pessimistic when he says that "our way of life is by nature unfortunate and difficult" (*Protr*. 48.9-16) and "there are many consequences of life that make men flee away from life, such as disease, excessive pain, storms" (*EE* 1215b19-21). He thinks the "majority of people are concerned about mere living instead of living well" (*Protr*. 46, 22-6) and they "have no articulate and reflective conception of happiness and instead they focus on their most immediate needs and concerns" (*EN* 1095a14-22). Elsewhere he complains that most people live as if they had a clear conception of happiness, namely, pleasure. However, they merely come to have this conception

[65] See Lear 1988, 168 on Aristotle's optimism in this context.

through mere living rather than after any reflection about the highest good (*EN* 1095a14-22). In the *Politics* we learn that even in the ideal *polis* only the free male citizens will be capable of achieving the most choiceworthy virtuous life. Aristotle tells us that practical wisdom is an excellence that is only distinctive of the ruler who can supposedly be a free male (1277b26-7). To achieve this excellence is not within the capacity of the women presumably because of a deficiency in their nature, that is, the deliberative capacity (*bouleutikon*) of women is said to lack authority (1260a13: *akyros*). The natural slave, on the other hand, completely lacks deliberative reason (1260a12) which is indispensable for making practical decisions and choices. Hence the majority of the population of the best city will be incapable of pursuing a good life appropriate for a human being.[66]

Now while according to natural teleology the development and completion of other natural beings are ultimately guided by natural causes, that is, the formal nature of the living organism drives the development and growth of the organism towards its end either always or for the most part, human beings seem to be weakly determined in the direction of their *telos*.[67] A passage in *EN* i 9 indicates Aristotle's awareness of this specific condition of human beings and can be adduced as evidence for how natural teleology figures in ethical discussion. Aristotle argues that happiness which involves excellent performance of human *ergon* is neither by nature nor by chance but

[66] See also *Pol*. 1331b39-42: "Now everyone aims at living well and happiness is clear, but some are capable of these things while whereas others are not, because of some misfortune or their nature." It is likely that Aristotle has in mind the slaves and the women with his reference to those who are incapable of happiness due to their nature. Cf. *EE* 1226b21–30 (21–22: "therefore choice is not present in all other animals, nor in a human of every age, nor in a human of every condition"). Here again, it is possible that the last category hints at natural slaves, who are incapable of making choices because they lack the *bouleutikon* completely (*holôs*).

[67] The absence of discussion of human behaviour in the zoological texts can be a sign of the exceptionality of human nature in connection to natural teleology. Scholars have realized that Aristotle does not discuss human behaviour in *HA* i 1 where he discusses activities and ways of life of other animals. Beullens and Gotthelf 2007 have drawn attention to *Politics* i for the missing discussion in the *Historia Animalium*. "The study of man's πράξεις and βίοι (and indeed ἤθη), then, might well have seemed to Aristotle, when finishing *HA* Book vi (or earlier), to be a complex mix of theoretical and practical philosophy, much of which should be set aside for special treatment" (477).

is rather due to some kind of learning and personal effort (*EN* 1099b19).[68] In an attempt to defuse the tension mentioned, he says that:

> It will also on this view be very generally shared; for all who are not maimed as regards excellence may win it by a certain kind of study and care. But *if it is better to be happy thus than by chance, it is reasonable that the facts should be so, since everything that depends on the action of nature is by nature as good as it can be*, and similarly everything that depends on art or any cause, and especially if it depends on the best of all causes. To entrust to chance what is greatest and most noble would be a very defective arrangement. (*EN* 1099b18-1099b24, my emphasis) [69]

Aristotle argues that since things that are natural and likewise those in accordance with art or necessity are as good as they can be, it should be insensible to leave what is the most noble, i.e., happiness through excellence, to chance. If happiness is attained by study and care rather than by chance, it is better that way and "it is reasonable the facts should be so".[70] What we have here is a version of the teleological principle that 'nature does nothing in vain'. In the literature it has been called 'the optimality principle'.[71] Note this principle in a parallel language at the opening of the *Progression of Animals*:

> At the beginning of the inquiry, we must postulate the principles we are accustomed constantly to use for our scientific investigation of nature, that is we must take for granted principles of this universal character which appear in all nature's work. Of these one is that nature creates nothing without a purpose,

[68] Nagel 1980 calls the requirement that human beings are to achieve their *telos* by their own effort 'the condition of autonomy' (9). See also Whiting 1988, 43 and Cooper 1969, 20-21.
[69] This passage was brought to my attention by Achtenberg 1992, 327 and Leunissen 2015, 229.
[70] Cf. *Pol* 1255b1-4: For they [people] assume that just as from a man springs a man and from beasts a beast, so also from good parents comes a good son; but as a matter of fact, nature frequently while intending to do this is unable to bring it about.
[71] See Henry 2013 and Gelber 2021, 103.

> but always the best possible in each kind of living creature by reference to its essential constitution. Accordingly, *if one way is better than another that is the way of nature.* (*IA* 2.704b11-18, tr. Farquharson)

Thus, if it is better that happiness is acquired through study and care, this will allow human beings more widely to share in happiness. As I already highlighted, Aristotle is in principle an optimist about the human capability to achieve their *ergon* fully and attain happiness. After all he discarded the Platonic form of the good exactly because he was searching for something attainable by human beings. In the *EE* he repeats the same point that if happiness is a matter of actions and efforts of human beings and thus it is in their power, "the good will be at once a more common possession" (*EE* 1215a16). As it seems to me the passage at *EN* i 9 shows two things that are important for our purposes. First, Aristotle is aware that there is a sort of tension between his natural teleology and the condition of human beings. Second, Aristotle tries to explain why the human case presents the human a special case by appealing to some precepts from his natural teleology.

Hence, although performing human *ergon* to some degree is a generally shared characteristic that depends on the human biological constitution, failure to achieve human *ergon* fully which consist in excellent reason-based activities is a ubiquitous phenomenon. In fact, in a way, the possibility of failure itself seems to be part of human nature. According to *Metaph*. ix 2 and ix. 5, where Aristotle discusses capacities and their actuality, Aristotle differentiates two types of capacities in the ensouled beings: rational and non-rational capacities (1046a36-b4). Whereas non-rational capacities produce necessarily one effect in the circumstances where the agent meets the patient appropriate to the capacity, rational capacities are not bound by such necessity (1048a4-8). They are capable of producing contrary effects (1046b5-24). Since rational capacities are open-ended in this way, there seems to be an indeterminacy built into human action. Aristotle says that what determines what outcome is going to be produced, "that which decides…must be something else…desire (*orexin*) or choice

(*proairesin*)" (1048a10-11) which are to be shaped by the acquisition of virtues that are themselves the product of previous practice. Thus construed, failure to complete one's nature becomes something that one is appropriately held responsible for.

I take Aristotle to think that human beings need both an absence of natural impediments as well as some external enabling conditions[72] of success such as physical arrangements and culture and education[73] to achieve their *ergon* fully.[74] As we already saw the natural constitution of women and natural slaves seem to involve certain impediments that prevent them to achieve the human *ergon* in an excellent way. Natural slaves lack deliberation and women's deliberative reason is powerless (*Pol*. 1260a12-13). Further, as Leunissen has convincingly argued, certain environmental factors have an impact on humans' natural character. Natural character depends on its elemental 'blend' and this 'blend' is influenced by "efficient-causal changes due to aging and disease, diet, and external environmental factors" (2012, 509). In *Politics* vii 16 Aristotle enumerates a number of measures for legislators concerning the best environmental circumstances, physical features of couples to marry, the best time for sexual intercourse et cetera to produce offspring in the best possible condition. Furthermore, he provides elaborate details about the education in the household (*Pol*. vii 17), public education, how leisure time should be designed and so on (all book viii is devoted to this topic) as enabling conditions for the citizens of his best *polis* to achieve their *telos*.[75]

[72] See Garver 2006, esp. chapter 6 on an interesting and rich discussion on how virtuous people create the 'enabling conditions' in which virtues can flourish.

[73] Cf. Broadie 1996, who uses the phrase 'culture and education' as essential factors for the formation of *nous*.

[74] As Rabbås 2015 writes, ethics serves this purpose by "sketching the structure of human nature and the essential features of human life. In this way ethics will strengthen our deliberative capacity and help us articulate and consolidate a true conception of the ultimate end of human life: success as a human being—that is, eudaimonia" (112).

[75] Aristotle thinks that man is by nature a political animal and that he can only perform his defining *ergon* fully and become virtuous within the *polis* that promotes human happiness. In this human beings are analogous to bodily parts that perform their defining capacity only in relation to a functioning whole (cf. *Pol*. 1253a18-22, 1261a15-22). Similar to bodily parts, human beings can perform their *ergon* fully only in the context of a well-functioning political community. There is a difference, though. While

Finally, the fact that education and art 'supplement' human beings to achieve their end, does not imply that human beings are artificial products. "From art proceed the things of which the form is in the soul." (*Metaph*. 1032a32) But the form of human beings is not in the soul of any artist. The role of any art and education lies in their contribution to complete or perfect human defining capacity, i.e., their *ergon*, to the fullest degree.[76]

3.5. Conclusion

Before concluding I want to point out some ethical considerations that need to be stressed regarding the present interpretation of the *ergon* argument. One of the significant points worth stressing is that the *ergon* argument does not stand alone to identify specifically in what the human good consists. The result of the *ergon* argument, namely, excellent rational activity has to be supplemented with further considerations that will allow us to see what kinds of ends or goals will fit the bill. Here the two formal criteria that are introduced right before the *ergon* argument gains significance (*EN* i 7.1097a15-1097b20). The chief good, Aristotle claims, must be something complete (*teleion*) and as a complete good, it also needs to be self-sufficient (*autarkes*). Both concepts are eventually included in the definition of happiness: "happiness is clearly something complete and self-sufficient, being the end of the

a bodily part such as an eye becomes only 'matter' or 'heap' (*Metaph*. 1040b5-10) and is called 'eye' only homonymously when taken out of the whole functioning body, a human being can still be called 'human' non-homonymously outside the political community as existing as a human is constitutive of their biological nature and they always already perform a modest degree of rational activity. Outside the *polis* they will lack the opportunity to bring their defining *ergon* to completion and thus become virtuous, good, and wise human beings. It can be instructive to compare humans to parts of artificial wholes. Even when they are not providing for the function of an instrument, artificial parts retain their identity outside of their whole. Although they are not fully what they are when not in such a whole, still (unlike organs) they can be reused. Humans outside of the city -if they are really human, i.e., have a language, can engage in activity—can in principle join a community. Nevertheless, they will indeed become the 'worst of all animals when sundered from law and justice' (*Pol*. 1253a29-36). See Lear 1988, 165 and Leunissen 2017, 123 for a similar point.

[76] See Reeve 2013, 513-514 and Miller 2000 for discussions concerning the role art plays in the improvement and completion of human nature.

things achievable in action" (1097b20-21). In his analysis of completeness Aristotle appeals to what ordinary language use reveals: "we say (*legomen*) that what is worth pursuing for itself is more complete than what is worth pursuing because of something else" (1097a30-31). For self-sufficiency, though, his definition reveals rather his own conviction about the right content of the concept: "By 'self-sufficient', we do not mean sufficient for oneself alone, for the person living a life of isolation, but also for one's parents, children, wife, and generally those one loves, and one's fellow citizens, since man is by nature a political being…the 'self-sufficient' we posit as being what in isolation makes life desirable and lacking in nothing, and we think happiness is like this" (1097b6-16). The relevant sense of self-sufficiency that Aristotle is interested in is one that is 'political.' The idea is that individual self-sufficiency is just impossible. Hence self-sufficiency should be achievable in some community, be it the family, the tribe, or the *polis*. This is closely related to Aristotle's general teleological framework in which human beings are regarded as the kind of animals that pursue a political way of life (*bios*).[77] By being committed to the view that as an end achievable in action happiness is complete and self-sufficient in this specific sense, Aristotle already suggests more narrowly in which kinds of rational pursuits the chief good will reside. The ultimate account of happiness will need to include a discussion of others as one's family, friends, and fellow citizens. For example, he argues that "friendship is a kind of excellence or goes along with excellence, and furthermore is most necessary for living (*anankaiotaton eis ton bion*). For no one would choose to live without friends, even if he had all the other good things" (*EN* 1155a3-6). The self-sufficiency condition understood in the above sense will figure also in *EN* x 7 in the discussion of contemplation 'as the best and the most complete virtue.' Everyone including the wise contemplator "will require the things necessary for life" (1177a29;

[77] See *HA* 487b33–488a13; *Pol*. 1253a2–18, 1278b15–30; *EE* 1242a22–24; *EN* 1162a17–18, 1169b18–19. See Depew 1995, Cooper 1990, 306, n.6 on the spectrum of the more and the less political lives; Karbowski 2019b on an instructive assessment of the distinction between narrow and broad political natures of animals with a focus on the specific case of human beings.

see also 1178a24-28 for the need for necessaries). Although an uninterrupted and continuous activity of contemplation would be the most complete happiness possible for humans (1177b25-28), that wouldn't be an achievable end for the kind of being humans are. "In so far as he [the wise man] is a human being, and shares his life with others, he chooses [also] to do the deeds that accord with excellence" (1178b5-6). Hence insofar as human beings have a political nature, in addition to contemplation which is the best and most complete virtue, a discussion of friendship, political activities and ethical virtues should be incorporated into the final account of happiness in appropriate ways.[78] Being incomplete as it is, this brief outline shows that the *ergon* argument is not intended to stand alone to provide what the chief human good consist in.[79] It also needs backing from an equally significant and essential aspect of human nature[80] in addition to other theoretical considerations such as the 'completeness' criterion.

The second remark I want to make before concluding is related to the legitimacy of the *ergon* argument in its role in determining what is good for human beings. The crux of the argument seems to be that what is good for human beings is determined by the kind of being humans are. From the fact that rational or reason-based activity is the *ergon* of human beings, Aristotle seems to be deriving the conclusion that excellent rational activity constitutes human good. With a more or less similar portrayal of Aristotle's assertion, some have disputed the legitimacy or viability of the *ergon* argument for ethics. It has been claimed that Aristotle commits a sort of naturalistic fallacy by deriving human good from a fact about human nature.

[78] See Whiting 1988, 43-45 and Leunissen 2015, 218-224 on the role human political nature plays in Aristotle's account of the good.

[79] I don't need to settle here the question about the inclusive/exclusive or comprehensive/dominant end views of *eudaimonia* for the sake of the argument of this chapter. For a recent collection of essays on this topic see Destrée and Zingano 2014.

[80] See Gelber 2015 on how the habitat and consequently ways of life of animal species figure in the essence of those animals. "A human living outside of a polis is either 'worse or greater than human' (*Pol*. i 2.1253a2-4) and it is a human life that Aristotle cares about understanding. A flourishing human life, Aristotle thinks, essentially involves living in a certain sort of habitat. The same goes for other living beings" (289-290).

In other words, it has been thought that from a descriptive claim about what kind of beings humans are, Aristotle reaches a normative conclusion about how human beings ought to live. However, as it seems to me, this is not exactly the right description of Aristotle's *ergon* argument and hence his account of the good. As we saw more extensively in section three, the good of a thing which is (unconditionally) beneficial for that kind of thing is constituted by bringing the defining capacity of that thing to completion. This is the gist of one of Aristotle's statements we quoted before: "when the natural *ergon* of each thing is brought to completion and is said to be most beautiful not by coincidence but by itself, that is when one should say that it is good" (*Protr*. 42, 5-7). As we have noted before, this suggests, first, that the thing in question always already and inescapably exercises its essential capacity to exist at all. Our biological nature is so constituted that we inescapably exercise rational activity in all our theoretical and practical endeavours. Second, the human end which also gives the human good manifests its essential capacity in a completed form. Since we discussed that the concept of *ergon* denotes both the essential capacity and the final cause of a thing, human *ergon* refers to the exercise of human rational capacity with a view to its completed developed state. Thus considered, human good turns out to be tied to human nature in its completed or perfected state. This in return consists in excellent theoretical and practical activities and achieving this end is within our control. Hence as the best and most complete virtue, contemplation does not exhaust what it is to be the human good which seems to be the assumption of those who find a fallacy. Rather, it is that by virtue of which human *ergon* is brought to completion.

4. The *Protrepticus* on the Utility of Theoretical Philosophy for Political Science

4.1. Introduction

Whether Aristotle's ethics rests on his metaphysical or natural theories is a longstanding debate. As is well-known Aristotle frequently appeals to certain extra-ethical claims about human nature, soul and activity that are also discussed in his theoretical philosophy. The reception of this aspect of Aristotle's ethics and politics varies widely. Some scholars have claimed that Aristotle appeals to his psychological and biological works to justify his views in political science (including ethics). For instance, they have argued that Aristotle defends an account of human happiness by appealing to some claims concerning facts about the human soul and its function.[1] Others have claimed that Aristotle's political science is explanatorily dependent on his theoretical philosophy. Just like optics is explanatorily dependent on and subordinate to geometry, similarly Aristotle's political science rest on certain theoretical sciences.[2] A third group yet denies any kind of dependence relationship between the two. These scholars believe that Aristotle's political science is entirely autonomous from his theoretical philosophy.[3] This chapter is a contribution to the ongoing debate, and it

[1] See Irwin 1978, 1980, 1988; Shields 2015, Whiting 1988, Bostock 2000, and Leunissen 2015.

[2] See Johnson 2015, Scott 2015, Achtenberg 2002.

[3] See Gomez-Lobo 1989, McDowell 1980, 1995, 1998, Polansky 2014, Roche 1988, Barney 2008. See Karbowski 2019a, 217-248 who introduces much of the related scholarly debate, analyses Aristotle's ethics along both justificatory and explanatory lines and concludes that it is autonomous all the way through. I owe the idea of distinguishing the views along justificatory and explanatory lines to Achtenberg 2002, 61-62 and Karbowski 2019a. Nevertheless, I disagree with the conclusions of both scholars.

claims that Aristotle's political science depends on his theoretical philosophy to a certain degree.

Since scholars have argued for strikingly opposing claims by appealing to the same passages, concepts, or discussions without reaching any agreement, so far, the debate seems to have ended in a stalemate. I will take up the question from a different angle. I will appeal to what I call the utility argument that Aristotle makes in the *Protrepticus*—an early text devoted to making exhortation to doing philosophy. Going back to the *Protrepticus* is useful for the following reason. Since this text is intended for inciting and encouraging the audience to do philosophy, Aristotle clearly enunciates the role he assigns to theoretical philosophy in our practical lives, especially, in our political concerns and endeavours. However, he is not as articulate on that subject in his later works. I believe that in particular Aristotle's utility argument in defense of theoretical philosophy can illuminate the vexing question of dependence considerably.

In what follows I will argue for the claims listed below. The initial three claims specifically pertain to the *Protrepticus.* The fourth claim links the results of the discussion in the *Protrepticus* with Aristotle's later work to show their broader applicability.

(1) Aristotle coherently defends the view that while theoretical knowledge is intrinsically (καθ' αὑτό) valuable and choiceworthy as an end in itself, it has some accidental utility in practical life. Theoretical knowledge is useful accidentally (κατὰ συμβεβηκός) [4] from the perspective of the agent who exercises *theôria*.

[4] Aristotle doesn't use the phrase κατὰ συμβεβηκός to refer to the accidental utility of theoretical philosophy in the *Protrepticus*. This contrast comes from the *Eudemian Ethics* which we will discuss shortly. That doesn't suggest that κατὰ συμβεβηκός is not available to Aristotle in the *Protrepticus,* though. It is available and it occurs in a very important remark: "when the natural function of each thing is brought to perfection and is said to be finest not by coincidence (κατὰ συμβεβηκός) but by itself (καθ' αὑτό), that is when one should say that it is good" (42,5-6).

(2) Aristotle considers theoretical knowledge of the human end, the human soul, and its parts as a requirement for the good person or politician to perform fine actions and lay down good laws. Theoretical knowledge is useful essentially from the perspective of the practical agent.

(3) The theoretical knowledge required for the good person or politician has to be construed in a non-minimalist sense, that is, it cannot be gained by mere observation or experience but rather by doing philosophy to some extent.

(4) The non-minimalist requirement of theoretical knowledge for the good person or politician is retained in the later treatises.

It must be noted that I do not promise to settle the question regarding the nature of the dependence relationship between political science and theoretical philosophy, i.e., whether it is an explanatory or justificatory relationship. A satisfactory demonstration of that aspect goes beyond the scope of this chapter. I rather propose to reconsider the debate from the prism of the utility argument in the *Protrepticus* which reveals that political science relies on theoretical philosophy in some recognizable way.

A second important caveat to bear in mind is that this chapter is not committed to any claims concerning the nature of the items such as the human end, the human soul, and its parts whose knowledge is beneficial for the politician. The question to what extent Aristotle modifies his scientific views about those things across different treatises is neither the concern of this chapter nor essential for its argument. My claim is rather concerned with the scientific study of certain subject matter rather than the particular results of that inquiry. The chapter defends the view that sufficiently broad theoretical knowledge of the same subject matter is relevant to and required for political enterprise both in the *Protrepticus* and later treatises.[5]

[5] That said, see e.g., *Protr*. vii which includes a precursor of the function argument and some important statements about the soul and its parts that display much resemblance to his later views; e.g., the soul is a natural ruler and better than the body which is a natural subject and a tool to be used by the soul; similarly the reasoning (*logos*) and thinking (*dianoia*) part of the soul is a ruler and better than the part that follows and obeys reason; that we are 'either alone or most of all' (*monon hê malista*) our reasoning

In sections 1 to 4, I argue for my claims (1)-(4) listed above respectively. In section 1 I defend the first claim by appealing to various passages and the discussion throughout the *Protrepticus*. In sections 2 and 3 I will restrict my discussion to two critical arguments in *Protr*. x, one of the most controversial chapters of the *Protrepticus*. This is where Aristotle's doctrine of the utility of theoretical philosophy results in a set of arguments that have a pivotal role in our debate concerning political science. Hence, a significant portion of this chapter will be devoted to the analysis of these arguments. Finally, in section 4, I will relate the discussion in the context of the *Protrepticus* with Aristotle's later works by drawing on some texts from the *Nicomachean Ethics* and the *Parva Naturalia.*

4.2. On the intrinsic value and accidental utility of theoretical knowledge

The *Protrepticus* comprises a set of arguments to demonstrate that it is possible to do philosophy and acquire philosophic knowledge and moreover, that this enterprise is easy and useful. In particular, *Protr.* vi seems to be on what philosophy is. Philosophy, we are told, is "both a possession and use of wisdom[6] and wisdom is among the greatest goods" (40,2-3).[7] With regard to the nature of that wisdom, we are told that it is "the kinds of knowledge that concerns the just and the expedient as well as what concerns nature and the other sort of truth (τὰς…τῆς ἄλλης ἀληθείας ἐπιστήμας)" (37, 26-38, 2).[8] This statement evinces two types of knowledge: First, the knowledge of

and thinking part (41,23-42,4). Aristotle's use of *energeia* and *dunamis* on several occasions is also noteworthy. In particular at *Protr*. xi 56,15-57,6 his use of this famous pair in the context of discussing knowledge and sensation in the sense he does in *DA* ii 5 is worth stressing. See Düring 1961, 245 on the *kata dunamin-kat'energeian* distinction in this passage. See also Menn 1994 on an illuminating exposition of the origin and development of this terminology.

[6] κτῆσίς τε καὶ χρῆσις σοφίας.

[7] All the translations from the *Protrepticus* (Pistelli edition) belong to Hutchinson and Johnson 2017 with occasional alterations. Unless indicated otherwise all the translations from Aristotle's extant treatises are from Barnes 1984 with slight modifications.

[8] See Hutchinson and Johnson: "The definition of philosophy as "both possession and use of wisdom" seems to be unique to *Protrepticus*...and was probably formulated in this dialectical context as a direct

what is just and expedient which can be depicted as practical knowledge. Second, the knowledge concerning nature and the other sort of truth, which can be called theoretical knowledge.[9]

After Aristotle establishes the possibility of acquiring philosophical knowledge, he sets out to show that it is useful and easy to acquire. As it has been established persuasively by Hutchinson and Johnson (unpublished), Aristotle's *Protrepticus* is indeed a response to Isocrates' attack on the Academic conception of philosophy. For Isocrates, philosophy is an enterprise that mainly focuses on rhetorical education (*Against the Sophists* 16-18). He thinks that a formal education that aims at developing the ability of the student in speech that is undertaken by the supervision of a versed teacher as a paradigm serves both affective political speech and promotes good actions. Hence, the Isocratean attack focuses especially on theoretical knowledge on the grounds that this sort of knowledge does not yield any beneficial results in human life (*Antidosis* 261 and *Panathenaicus* 26) and it renders those who are preoccupied with such disciplines as geometry and astronomy less capable than their students and servants in the practical matters (*Panathenaicus* 28-29). Moreover, Isocrates finds the type of philosophical speculation along the lines of

response to Isocrates's charge about the uselessness of mathematical and theoretical philosophy, using a distinction and vocabulary familiar to Isocrates (e.g., *To Demonicus* 28)" (2017, 25, n.62)

[9] Jaeger 1948 argues for a three-fold division of philosophy in this passage. Ethics corresponds to the knowledge about the just and expedient, physics to the knowledge about nature and dialectic to the knowledge about the other sort of truth. This, he thinks, is the Platonic division of philosophy to which Aristotle still subscribes to in the *Protrepticus* (84). As de Strycker 1960, Devereux 2014 and recently Hildebrandt 2020 have more persuasively shown, the argument about our capability of this knowledge in question follows a two-fold structure, one for knowledge of the just and expedient and the other for knowledge of nature and 'the other sort of truth' which supports the view that they correspond to practical and theoretical philosophy respectively with the possible further articulation of both practical and theoretical philosophy. The knowledge regarding 'the other sort of truth' could involve mathematics and metaphysics both of which are concerned with causes. See e.g., *Protr*. vii 38,3-38,7 that also allows this reading: "things that are prior are always more familiar than posterior ones, and what is naturally better than what is worse, for knowledge is more about things that are determinate and ordered than their opposites, and more about causes than their results." Finally, another important passage in support of a dual division of philosophy occurs at 35, 5-14 where Aristotle explicitly draws a contrast between two kinds of thought and two corresponding kinds of knowledge. Here, '*sophia*' is exercised in acts of *theôria* and '*phronêsis'* is essentially tied to action.

natural science and the Platonic search for principles into nature and reality absurd. He sees no intrinsic value in the philosophical speculation pursued by the tradition that Aristotle sees as his predecessor.[10] Young men are advised "not to allow their minds to be dried by these barren subtleties" and the philosophy of the thinkers such as Empedocles and Parmenides is seen "on par with the juggler's tricks which, though they do not profit anyone, yet attract great crowds of empty-minded" (*Antidosis* 268-9).

Accordingly, in the *Protrepticus* Aristotle focuses his attention on defending theoretical activity (*theôria*) and knowledge.[11] While Aristotle argues that theoretical activity and knowledge is intrinsically valuable and choiceworthy, even if no further end comes about from it, he also thinks that the pursuit and possession of theoretical knowledge can incidentally have important benefits and results in our practical actions and endeavours. Andrea W. Nightingale has argued that in the *Protrepticus* still under the spell of Plato, Aristotle in fact defends the uselessness of *theôria*, while he only occasionally and inconsistently claims that theoretical reason is useful for practical and productive activities. She asserts that Aristotle drops the latter claim in his mature works (2004, 196-197). I think Nightingale is mistaken in this interpretation. As I will show below, two aspects of theoretical knowledge are defended equally often hand in hand in the *Protrepticus* and moreover, both aspects are retained in later works. Because the *Protrepticus* includes a defense of theoretical philosophy, Aristotle is undeniably more articulate about its usefulness. The fact that this articulateness is less manifest in other works seems to have misled Nightingale.

In *Protr.* vii, Aristotle emphasizes the intrinsic value of intelligence (*phronêsis*) and in particular, theoretical knowledge.[12] After a long argument which seems to be a

[10] Hutchinson and Johnson, unpublished, 17-18. See Wareh 2013, ch.1 for on the link between Isocrates' and Aristotle's philosophical views.

[11] Instead of contemplation, I prefer to use theoretical activity and knowledge for different renderings of *theôria* and I will leave it untranslated at times.

[12] It's worth noting that Aristotle uses the concept of *phronêsis* broadly throughout *Protrepticus* to refer to both practical and theoretical intelligence (unlike his use in *EN* vi). This usage has been central to

precursor of the function argument in the extant treatises (41,24-43,25), Aristotle concludes that nothing is better than intelligence as an end and the kind of knowledge that is the excellence of this capacity is theoretical knowledge rather than productive knowledge (43,20). Then he adds that:

> Being intelligent (φρονεῖν) and observant (θεωρεῖν) is a function of the virtue, and this of all things is the most valuable for humans, comparable, I think, to seeing for the eyes, which one would choose to have even if there was not any other thing that was going to come into being through it beyond the sight itself. (*Protr*. 43,20-25)

One of the reasons that makes theoretical activity the most valuable activity for human beings stems from its non-productive or non-instrumental nature as a final end.[13] We are told that "when of two things one is valuable because of the other, the one on account of which the other is valuable is better and more valuable" (42,25-26). For instance, "pleasure is better than pleasant things and health is more valuable than the things conducive to health" (45,27). Hence, of the things that are valuable and worthy of pursuit, some are instrumentally good and choiceworthy because of further things to which they are conducive, whereas the things that are not valuable for further ends are good and choiceworthy in themselves as final ends. In this regard, *theôria* is said to be the most valuable thing for human beings because it is not productive of a further

Jaeger's developmental thesis. He thought that Aristotle equates *sophia* and *phronêsis* in the *Protrepticus* and this makes him committed to the Platonic unity of theoretical and practical knowledge. Nevertheless, in the *Protrepticus* Aristotle at times uses *sophia* as well which suggests that he already has in mind a certain distinction between *sophia* and *phronêsis* (See 59,26-60,1) and which makes Jaeger's view doubtful. As scholars have established Aristotle uses the terms loosely due to protreptic purposes. See e.g., Hildebrandt 2020, 34-43; Hutchinson and Johnson 2017. As he is defending academic philosophy against Isocratean type of attacks and tries to attract philosophical novices, it is likely that he doesn't want to delve into technical disagreements between himself and Plato. Moreover, at the time *phronêsis* was commonly used to signify thinking, intellectual activity and understanding in general and Aristotle seems to follow the common usage. Surprisingly, he continues to use the term *phronêsis* in this broad sense on some occasions in *EN* (1096b24), *Eudemian Ethics* (*EE* henceforth) (1214a32-33) and *Metaphysics* (1009b11-33). In *Metaph.* 982b11-24 he even uses *phronêsis* more particularly to refer to theoretical knowledge.

[13] See *Metaph*. 982a14-b12 on the intrinsic value of theoretical knowledge.

end.[14] In this, it is analogous to sight. Even if nothing other than sight is produced by eyesight one would still choose to have it. In a similar way *theôria* is choiceworthy for human beings even if it doesn't produce any results or benefits.[15]

At *Protr*. 52,16-53,2 Aristotle distinguishes necessary things from the goods in the strict sense while treating those who demand some benefits from *theôria* with disdain. Aristotle associates necessary things with living because without them living is impossible. They are the things that are appreciated because of other things. They are considered as good albeit in an instrumental sense because their goodness is derivative from and relative to the goods to which they are conducive. Elsewhere he similarly treats with scorn those who stick to living rather than living well and describes those who show concern for money instead of beautiful things as slavish (40,6-11). Moreover, the existence of strict goods that are useless and non-productive for further ends provides a solution to an infinite regress that stems from expecting a further use and benefit from every valuable thing. Only someone ignorant of what is beautiful and good would insist on asking for the utility of everything. He wants to say that they also make an error of logic and thus overlook that their pursuit of seeking benefit in everything leads to an infinite regress.

Aristotle illustrates the non-instrumental aspect of *theôria* with a memorable image in the following passage.

> For just as we move away to Olympia for the sake of the spectacle itself, even if there is going to be nothing more to get from it (for the observation itself is superior to much money), and as we observe the Dionysia not in order that we will get anything from the actors (rather than actually spending), and as there

[14] Being non-productive however, is not to be considered as a sufficient condition for being the most valuable thing for human beings.

[15] See *Metaph*. 980a24-28 for the comparison between theoretical knowledge and 'seeing for the eyes'. See also *EN* 1097b31 for the appeal to the human eye and its *ergon* in the context of identifying human *ergon*. For a helpful comparison between the function and pleasure of perception for non-human animals and humans see Richardson 2004. Since for human beings perception is quasi-knowledge, perceptive capacities, and in particular sight are desirable in themselves and we delight in them as such besides their use in sustaining our physical being (164-165).

> are many other spectacles we would choose instead of much money, so too the observation of the universe should be honored above everything that is regarded as useful. (*Protr*. ix 53,19-26)

Observe that in the *Protrepticus* Aristotle intentionally and consistently employs the analogy of seeing to argue for both aspects of *theôria*. At 43, 20-25 that we mentioned above, he appeals to seeing to support his claim regarding the intrinsic value of *theôria* despite its non-productive nature. In *Protr*. x, he this time uses seeing to argue for both aspects of *theôria* concurrently. He tells us that both seeing and *theôria* are not productive or craftsmen of anything. The function (ἔργον) of sight is to judge and clarify visible things. Although its *ergon* is not to produce any outcomes, it is of great help to us in our actions as without it we would not be able to move or perform any actions. Analogously, the function of theoretical knowledge is not to produce any benefits, nevertheless, we are capable of doing countless things "in accordance with it" and through it "we possess everything that is good" (*Protr*. 56,4-12). Aristotle's idea that something can be non-productive due to its *ergon* and thus be intrinsically valuable appears to be consistent with the accidental utility of that thing. We find that Aristotle defends the same point in a much later work. In the *Eudemian Ethics* Aristotle reiterates his claim about the intrinsic value of theoretical knowledge as a non-productive final end as well as its accidental utility simultaneously:

> […] with regard to theoretical knowledge…there is no other part of astronomy or physics or geometry except knowing (γνωρίσαι) and observing (θεωρῆσαι) the nature of the things which are the subjects of those sciences; though nothing prevents them from being in an incidental way (κατὰ συμβεβηκός) useful (χρησίμους) to us for much that we cannot do without. But the end of the productive sciences is different from science and knowledge, e.g., health from

> medical science, law, and order (or something of the sort) from political science. (*EE* 1216b11-18)[16]

Here two aspects of theoretical knowledge are explicitly defended. Their non-productive nature notwithstanding, theoretical disciplines may be useful (χρησίμους) in many things in an incidental way (κατὰ συμβεβηκός).[17]

It should be noted that *theôria* is useful *accidentally* from the perspective of the agent that exercises *theôria*. However, the modality changes when we turn to the practical agent. Theoretical knowledge is *essentially* useful from the perspective of the good person or politician. To continue the analogy with sight, when we are robbed of sight, we would be absolutely motionless (*Protr*. 56,8-9). Similarly, absent theoretical activity and knowledge, we as practical agents would be incapable of possessing good things. After all we "generally possess through it [theoretical knowledge] everything good" (*Protr*. 56,12).[18] In this sense, from the perspective of practical agents and politicians, its utility is essential, not accidental. Hence, when we talk about the accidental utility of theoretical knowledge this distinction must be kept in mind.

The fact that theoretical activity and knowledge is intrinsically valuable without any further ends while it is accidentally useful at the same time is a coherent idea that Aristotle defends in the *Protrepticus* and retains in his mature philosophy. In the next section, our focus will be on the utility of theoretical knowledge for political science.

[16] E.g., thanks to his astronomical knowledge, Thales made a killing in the olive business (*EN* vi 7.1141b4n). Notice that Aristotle's use of geometry, astronomy, and natural science echoes Isocrates' list in his attack on academic philosophy in *Antidosis* 261-7.

[17] Note that Aristotle doesn't use the phrase κατὰ συμβεβηκός to refer to the accidental utility of theoretical philosophy in the *Protrepticus*. Although Collins 2015 doesn't refer to the *EE* i 5 passage in his discussion, he repeatedly and rightly emphasizes the 'incidental' usefulness of theoretical philosophy in the *Protrepticus* (258, 263). See note 4.

[18] More on the universal applicability of theoretical knowledge in section three.

4.3. The utility of theoretical knowledge for political science

In this section, I shall turn to *Protr.* x which includes four different arguments on the utility of *theôria*. We have already mentioned one of them in which Aristotle uses the analogy of sight (56,4-12). This is in fact the concluding argument of *Protr*. x. Now we will analyze the first two passages which contain two different arguments in support of the utility of *theôria*. In these two passages whose analysis will be the subject of the following two sections, Aristotle urges that politicians must be "experienced about nature" and "must have certain standards taken from nature" to be effective in their tasks. In this section, I will focus on what that 'nature' could denote. As outlined in claim (2), I will argue that Aristotle considers some knowledge of the nature of the human soul and its parts or aspects as a requirement for the practical agent or politician to perform fine actions and lay down good laws. In section three, I will continue to analyze the same passages to defend my claim (3) concerning the source and scope of that knowledge required for politicians.

Good craftsmen and experience with nature

In our first passage Aristotle claims that the good legislators should be experienced with nature to be effective in their endeavours and bring about happiness in the state.[19] I will argue that what Aristotle means is that they should possess some knowledge pertaining to the human soul.[20]

Let us have the first passage with the first argument before us:

[19] On this point there seems to be agreement with the *Politics'* preferred best city. Also, as I take it the legislator and the good practical agent are meant to refer to the same person as Aristotle uses them interchangeably in the *Protrepticus*.

[20] As will be shown in the next section in detail, the knowledge that the good legislators are supposed to acquire is not *epistêmê*. This knowledge that pertains to the nature of certain theoretical items is not to be confused with "the kind of knowledge that concern the just and the expedient" (37,26-38,3). See note 9.

T1 And yet surely the fact that the benefits that are greatest to us for the human way of life are provided by the intelligence that is theoretical (θεωρητικὴ φρόνησις), someone will easily discover from the skills. For just as the doctors who are sophisticated (κομψοὶ) and most of those concerned with athletics pretty much agree that those who are going to be good (ἀγαθούς) doctors or athletic coaches must be experienced with nature (φύσεως ἐμπείρους), so good legislators must be experienced (ἐμπείρους) with nature (φύσεως), too, indeed much more than the former. For some are craftsmen of virtue only in the body while others, being concerned with the virtues of the soul (ψυχῆς ἀρετάς) and pretending to profess to know about the success (εὐδαιμονίας) and failure (κακοδαιμονίας) of the state, also require philosophy (φιλοσοφίας) much more. (*Protr*. x 54,10-22)

Briefly put, from the fact that sophisticated doctors and most athletic trainers would agree that good doctors and athletic trainers must be experienced with nature, Aristotle suggests that good legislators must be experienced with nature, too. The reason for this conviction comes later. Both groups are craftsmen of virtue, however, while the former are only craftsmen of the virtue in the body, which presumably is health, the latter are of the soul and they profess to know the success and failure of the state. The politicians are primarily said to possess some kind of practical knowledge pertaining to the well-functioning of the state. Nevertheless, they arguably also need some further knowledge that is to be acquired from a discipline outside their profession to be accomplished politicians. I believe that the 'nature' to be experienced with in question pertains to the nature of the body for the doctors/trainers and the nature of the soul for the legislators. Both groups are expected to have some sort of knowledge about a subject with which they are preoccupied, namely, 'body' and 'the soul'.[21]

[21] The fact that I think that in this passage 'nature' refers to the nature of the soul and its different aspects does not mean that the politician is expected to be only concerned about psychology in the *Protrepticus*

Werner Jaeger thinks that Aristotle has in mind Platonic transcendent forms in *Protr*. x and thus, 'the nature' in this (and the second) passage is to be construed against the backdrop of a Platonic ontology.[22] Notwithstanding some remarks echoing Platonic ontology in *Protr*. x, e.g., 'the imitation is on the basis of precise things themselves (αὐτῶν τῶν ἀκριβῶν) for the philosopher' (55,13), I think the Platonic reading of the *Protrepticus* in general, and of *Protr*. x in particular is far-fetched. Since it is not the focus of this chapter, I will not engage in this debate thoroughly. Here my objective is primarily to elucidate the concept of 'nature' and Jaeger's interpretation will occasionally be invoked for this purpose. Nevertheless, my reading of the two arguments in *Protr*. x adopts an anti-Jaegerean position, and all my arguments will turn out to contest Jaeger's interpretation.

First, an initial response that challenges Jaeger's Platonic interpretation can ironically be derived from a Platonic text. In the political theory of the *Laws,* the idea that the central concern of the politician is to make the citizens good is of fundamental importance. In an exchange with Clinias, the Athenian says that "knowing the natures (φύσεις) and the dispositions (ἕξεις) of souls" is one of the most useful (χρησιμωτάτων) things for statesmanship and it is a task to be performed by the politician (*Laws*, 650b6-10). As is well-known, Aristotle adopts the idea that politicians should be concerned about making the citizens good above all. It is beyond doubt that the *Laws* and *Protr.* x are parallel on this point. Both build on the significance of knowledge of the nature of the soul for political art. Second, in a strikingly parallel passage to T1 to which we shall return later, at *EN* i 13 Aristotle explicitly spells out the requirement that the politician should have some knowledge of the human soul since virtue and happiness have to do with the soul (1102a7-26).

in general. As we will see in a moment, *Protr*. ix will also point to an engagement with human nature more broadly. Yet, in the current passage Aristotle arguably only refers to the soul. This is not odd as depending on the context Aristotle sometimes highlights only the need for the knowledge of the soul for politicians, e.g., *EN* i 13.

[22] Jaeger 1948. See Von Fritz and Kapp 1950, 34, Düring 1961, 213–214, Monan 1968, 1–12, and Johnson 2015, 180–182, who disagree with Jaeger on this point.

Observe that, Aristotle emphasizes that the legislator must be experienced about nature "indeed, much more" than doctors and trainers (54,18). His later remark sheds some light on this claim. Although both groups are craftsmen of some virtue, doctors/trainers are craftsmen of virtue *only* in the body, while legislators are craftsmen of virtue in the soul (54,18-19). Moreover, the legislators profess to know the success and failure of the state (54,22). It should not be difficult to see Aristotle's point. First, as already mentioned with regard to *EN* i 13, for Aristotle virtue and happiness have to do with the human soul rather than the body, in other words, the goods that are more truly constitutive of a successful human life are the goods of the soul rather than the goods of the body (see *EN* 1098b12-5). Second, since the soul is directive or controlling of the body, its knowledge also has to involve knowledge of what it directs or controls. Third, according to *EN* i 2, politics is considered to be the most authoritative and the master art which ordains other sciences, and regulates their activities as the end of political science includes the ends of other sciences (1094b1-12).[23] Hence, since medicine or gymnastics are subordinate to the politics and their activities are regulated by the politician, he is expected to be more experienced about nature than the others.[24] The politician is engaged with a vast variety of issues that concern the citizens and the city whereas medicine or gymnastic is solely concerned with the health of the bodies. That's why, for instance, he thinks that "politics is more

[23] In *EN* i 2 he is after 'the most architectonic science' which has the supreme good as its proper object. In the *Metaph.* 982a14-19, 982b2-12 the most architectonic science will turn out to be metaphysics (the science which investigates first principles and causes). See Johnson 2015 for a comprehensive discussion of Aristotle's architectonic sciences.

[24] Although Aristotle doesn't explicitly mention or differentiate practical and productive sciences in *Protrepticus*, in a passage in chapter vi, he seems to have them separately in mind: "The kinds of knowledge that produce (αἱ ποιοῦσαι) each of the advantages in our way of life are different from the ones that use them (αἱ χρώμεναι ταύταις), and the ones that subserve (αἱ ἐπιτάττουσαι) them are different from the other ones that direct (ἡγεμονικωτέραις) them, in which the good in the strict sense exists as if they were more commanding kinds of knowledge." (37,16) I agree with Hutchinson and Johnson 2013 who think "The terminology used in the formulation of this distinction between kinds of science here coordinates with the familiar distinction between "practical" and "productive" science, both of which are frequently distinguished from "theoretical" science (*Top*. 145a15, *Metaph*. 1025b25, *EN* 1139a27)" (19, n.28).

honourable (τιμιωτέρα) and better (βελτίων) than medicine" (*EN* 1102a20-21). Hence, that the politician must be more experienced about nature becomes evident.

Good politicians and natural standards

In the second passage that immediately follows T1, Aristotle carries on arguing for the utility of theoretical knowledge:

> T2 For just like in the other craftsmanship skills the best of their tools (ὀργάνων) were discovered on the basis of nature (φύσεως) (in carpentry, for example, the carpenter's line, the measuring rod, the string compass) …similarly the politician (πολιτικόν) must have certain standards (τινὰς ὅρους) taken from nature (φύσεως) itself, i.e., from the truth, by reference to which (πρὸς ούς) he judges (κρινεῖ) what is just, what is good, and what is expedient. For just as in that area these stand out from all other tools, so too a law that is laid down most according to nature (ὁ μάλιστα κατὰ φύσιν) is most beautiful. But it is impossible for someone who has not done philosophy (φιλοσοφήσαντα) and recognized (γνωρίσαντα) the truth to be capable of effecting this. (*Protr*. 54,22-55,7)

Aristotle tells us that the best tools in arts were discovered on the basis of nature. Concerning this point, Ingemar Düring seems to be most helpful. We observe circles in the water when we throw a stone into the stagnant water, we observe straightness or different angles when we look at the rays of the sun. Carpenter's line, measuring rod, compass etc. are the tools which have been made on the basis of those natural phenomena and enable the craftsmen to test straightness, smoothness and so on (1961, 216).[25] Here we see an elaboration of Aristotle's principle that art imitates nature.[26]

[25] Düring 1961, 215 notes that Aristotle seems to be making a point that Plato makes in the *Philebus*, namely, that the more an activity is guided by a precise measure, the more reliable it will be. In the same context Socrates counts measures and tools such as the plumbline, ruler, and compass (56b).

[26] The principle that art imitates nature is also mentioned at *Protr.* vb. 34,8-9; ix 49,28-50,1, 50,12; See also *Phys.* 194a21-22, 199a15-17; *Mete*.381b6. Düring 1961, 187 notes that Hippocrates and Democritus are the original founders of this doctrine.

Analogously, the politician, too, is expected to have taken certain standards from nature by reference to which he can judge what is just, good, and expedient.

Now, as already mentioned, Jaeger rests much of his thesis concerning Aristotle's philosophical development on *Protr*. x, and construes 'the standards to be taken from nature' as a reference to Platonic transcendent forms. I believe that we should interpret this passage in its immediate context and the 'nature' that appears to be the source of the standards in question should be seen in close connection with the 'nature' of the soul and its parts as invoked in the preceding passage, i.e., T1.

Not only the immediate context of the *Protr*. x, but the *Protrepticus* as a whole lacks any conclusive evidence for a Platonic construal of 'nature'. Consider *Protr*. ix, in which Aristotle accounts for the naturality of human beings, the end for the sake of which they have come to be and the stages of the psychic development towards that end. Aristotle starts out by comparing things that come to be through nature, skill and luck, a discussion that has echoes in the opening chapters of the *Physics*. Whereas the things that come to be through luck lack any ends for the sake of which they have come to be, things that come to be through skill and nature have certain ends. Furthermore, in the case of nature and skill, the end is always something better (49,25-50,2). He invokes his famous dictum that "nature does not imitate the skill, but skill imitates nature, and it exists to help by filling in even what nature has omitted" (*Protr*. 50,1-2). Whereas nature can achieve certain things by itself without the need of any help, it cannot achieve others (50,2-3). For instance, some animals can attain their full nature themselves, however, "human beings require many skills for their security, both in respect of their first generation and once more in respect of their later nurturing" (50, 11-12).[27] At the end of this reasoning, in a passage that is clearly a precursor of a similar passage in *Pol*. 1334b12-26, to which we will return later, Aristotle gives in outline the stages of human psychic development that comes to

[27] See *Phys.* 199a15–17.

completion at a "certain intelligence." This is said to be the natural end for the sake of which we have come to be (*Protr*. 51,19-52,4).[28]

> Following this discussion, he urges that we must attend certain guidelines:
>
> Hence, one must do the other things for the sake of the goods that come about in oneself, and, of these goods, one must have the ones in the body for the sake of those in the soul, and virtue for the sake of intelligence; for this is the highest of all (52,12-52,16).

In this normative guidance to practical agents, Aristotle clearly enunciates what should be pursued in what order and with reference to what end. At this point, there is no explicit mention of the politician. Nevertheless, the fact that he addresses the legislator as the craftsman of the virtue in the soul immediately after this chapter is revealing. Arguably the politician is one of the addressees of this precept, too. The treatment of the legislator as a craftsman in *Protr*. x cannot be a coincidence. There is a link between the generation and development of human beings towards a certain end and the legislator's task as a craftsman to complete what nature has been incapable of achieving.[29] With his art, the legislator is required to achieve what nature has omitted. To achieve this end well he needs the theoretical knowledge of the human end, what kind of a soul they have, what stages of psychic development they undergo in order to perfect their nature and so on.[30] To return to T2, this is obvious evidence to

[28] I will return to the *Politics* vii in section 4.4 to say more about 'the standards.'

[29] Although legislation is an activity of *phronêsis* and differs from production Aristotle often characterizes the lawgiver as if he is a craftsman (δημιουργός) in the *Politics*. See *Pol*. 1253a30–31, 1258a21-24, 1266b34–38, 1268b34-38, 1273b30–33, 1274b18–19, 1282b14–16, 1325b40–1326a5. See Duke 2020 and Kontos 2021, 57-60 for the apparent interpretative problems that stem from this characterization and their cogent proposal to solve those problems. For a collection of essays on related issues see Rapp and Adamson eds. 2021.

[30] Güremen 2020 thinks Aristotle has a two-fold division of philosophy in the *Protrepticus*: philosophy-epistêmê which is about nature and other truths, and philosophy-technê which is about the virtues of the soul (See esp. 581-590). He thinks that the latter is for the sake of the former and it is, in chapter ix, the 'art' that is to "help nature complete its work and make us attain philosophy [-epistêmê] as the fulfilment of our nature." (587) To support this claim, he goes back to chapter iv where, he thinks, "Aristotle defines philosophy as "*technê kai epimeleia*" of the soul". (587) I have three objections: First, instead of going back to chapter vi, a few passages later in chapter x Aristotle defines the politician as

think that in the case of the politician who is expected to make judgements on the basis of certain standards taken from nature, the nature in question pertains to these claims and facts about human nature and in the specific context of T2, to the human soul and its aspects. In T2 the remark that "a law that is laid down most according to nature is most beautiful," (55,7) must be a reference to this expected compliance with those claims and facts pertaining to human nature broadly.

Before concluding this section, a point is worth stressing. There seems to be a mismatch in the analogy between the craftsmen and their tools and the politician and their standards in T2. The tools of the carpenters, for instance, are discovered on the basis of natural phenomena and not from the theoretical insights of another discipline, say, mathematics. After all, even if the carpenters consulted the mathematicians, they wouldn't understand the expertise of the mathematicians and moreover, carpentry is presumably older than mathematics in the first place. That said, Aristotle uses this analogy to shed light on his claim about the politician. However, it seems that the details of this analogy do not fully apply. The politician, as we read at the end of T2 will have to appeal to philosophy to effectively derive the 'standards' they need. As I will argue in a moment in the next section, the politician is expected to be 'well-educated' and this point about engaging in some sort of philosophical study is not supported by the analogy of the carpenters.

To sum up, if we take *Protr*. x and the broader context of the *Protrepticus* into account, the correct construal of 'nature' in T1 and T2 should be considered with reference to the human soul and its parts (and more broadly human nature in *Protr*.

the craftsman of the soul. So, it is not philosophy-technê, but the politician who has to be experienced with nature by doing philosophy to some degree that fulfils the 'productive' role to complete what nature has omitted, an idea that is also consistent with Aristotle's later works (see *Pol*. 1337a1–3 and note 29). Second, in chapter vi. Aristotle doesn't define the philosophy concerned with the virtue of the soul as "*technê kai epimeleia*." In *Antidosis* 180 Isocrates mentions gymnastics and philosophy as two "arts and disciplines" of the body and soul respectively. Aristotle just adopts Isocrates' terms, *technê kai epimeleia*, to respond to him in a rhetorical way. Third, Aristotle clearly defines philosophy concerned with the virtues of the soul as *epistêmê* several times in chapter vi. (37, 26-38, 8, 39, 10) So, the philosophy of the virtue of the soul cannot be philosophy-technê.

ix) rather than any extrinsic forms or ideas. In the next section, we will reflect on the source and scope of that "experience with nature" and will, in the meantime, deepen our understanding of the two passages.

4.4. The source and scope of theoretical knowledge

Recall that in T1, the legislators are said to require philosophy 'much more' (54, 18-22) which suggests that both the 'craftsmen of the soul' and the 'craftsmen of the body' under dispute need philosophy, and philosophy is the knowledge of the requisite nature involved to accomplish their tasks. Similarly, in T2 the politicians who need to 'take certain standards from nature' are expected to do philosophy (55,5-6). The requirement of theoretical knowledge which could be gained through philosophy reveals that to be effective in his practical endeavours, the good person or politician needs a non-minimalist, i.e., sufficiently broad knowledge of the nature of the human soul and its parts. Nevertheless, we should not be tempted to go in an expansionist direction, either. I think being non-minimalist notwithstanding, the theoretical knowledge required is not *epistêmê*, i.e., is non-scientific knowledge.[31] It is rather the knowledge of certain claims and conclusions about human nature, soul and its parts that could be gained by doing philosophy to some degree and which could not be acquired solely by experience and observation. In what follows I will defend this interpretation and in section 4, I will be able to say more about the nature of that knowledge which is non-scientific in connection to later works.

The universal applicability of theoretical knowledge

First, recall the aforementioned passage in which Aristotle compares sight and theoretical knowledge to show that despite having a useless and non-productive *ergon*, they help us pervasively in our practical life. This passage is the concluding argument of *Protr*. x in which Aristotle's arguments for the utility of theoretical

[31] See Bronstein 2016, 16-21 on a discussion of different types of knowledge in Aristotle.

knowledge culminate (*Protr*. 56,4-12). It also reinforces the claim concerning the non-minimalist requirement of theoretical knowledge for the craftsmen of the body and the soul. At the end of that passage, we read that "though the knowledge is theoretical (τῆς ἐπιστήμης θεωρητικῆς), we nevertheless do thousands of things in accordance with it, get some things and avoid others, and *generally possess through it everything that is good* (ὅλως πάντα τὰ ἀγαθά)" (*Protr*. 56,10-12, my emphasis).

Theoretical knowledge is said to allow us to 'possess generally everything that is good' which implies that it is universally applicable to all domains of life not even to mention our endeavours with the body and the soul. This is a strong claim about the all-inclusive and all-encompassing nature of theoretical knowledge. I take this remark to be a dialectical response to a speech by the character Isocrates in Iamblichus' *DCMS* 26 which is believed to belong to Aristotle's *Protrepticus* originally.[32] At *DCMS* 26 the character Isocrates says that "It should not be overlooked by someone who is going to scrutinize these subjects that *everything that is good* (πάντα τὰ ἀγαθά) and beneficial for the life of humans consists in being used and put into action, and not in the mere knowledge" (79,16-18). A few lines later, Isocrates proceeds to attack philosophy in an argument echoing the historical Isocrates of the *Antidosis*.[33] Isocrates enumerates six sciences and arts in pairs: Land-reckoning and geometry; musical performance and harmonics; navigational star-reckoning and astronomy. In each pair, there is one theoretical science that is argued to be useless in comparison to its practical or empirical version which is considered beneficial in practical life (*DCMS*, 26, 80,1-81,4). For instance, while those who do astronomy and engage with "causes and arguments have no knowledge of what's useful for humans" those who engage with

[32] See Hutchinson and Johnson 2017, 17 supporting this claim. The linguistic and thematic links I argue for also support this conviction.

[33] See *Antidosis* 261, *Panathenaicus* 26 for Isocrates' attacks on geometry and astronomy on similar grounds.

"navigational sciences about them are capable of predicting for us storms and winds and many of the events" (*DCMS*, 88,23-81,1).[34]

In these two successive passages, the character Isocrates first proclaims that everything that is good and beneficial must be put into action. He later spells out that theoretical sciences which pertain to arguments and causes are useless, whereas their practical versions that rest on experience and correct opinion are useful and provide the greatest of goods. I take Aristotle's remark about the universal applicability of theoretical knowledge to 'possess everything that is good' as an allusion to Isocrates. Aristotle seems to be saying that let alone land reckoning, musical harmony or navigation, theoretical knowledge is beneficial for everything that is good and of utmost importance, it is beneficial for political statesmanship which is the supreme 'craft' to bring about happiness to states.[35]

The educated man

Second, the concept of the 'educated man (ὁ πεπαιδευμένος)' which Aristotle features in *Protrepticus* and keeps employing in later works will be helpful in understanding the scope of theoretical knowledge required for the politician of T1-T2. I submit that in T1-T2 Aristotle indeed urges the politician to acquire the cognition of the educated man to exercise his expertise effectively. As I will show the cognitive state of 'educatedness' depends on doing philosophy to some extent, nevertheless, it is not scientific knowledge.

The main support for this interpretation occurs in one of the speeches by the character Aristotle in Iamblichus' *DCMS* 27. Although its authenticity is still controversial, Johnson and Hutchinson 2017, take *DCMS* 27 to be an authentic speech

[34] Cf. Aristotle's reaction to the role and significance of what is empirical in *Metaph.* 981a12-24 and *APo* 78b34-79a16 on the subordinate relationship of empirical sciences to their theoretical superordinate versions.

[35] See once again lines 1216b11-18 in the *EE*, which stresses that despite their non-productive nature, astronomy, physics, or geometry can be useful in an incidental way in much that we do and so we cannot do without them.

and hence include it among the fragments of Aristotle's *Protrepticus*. As we will see in a moment, I believe that they are right in this because *DCMS* 27 is almost identical to the opening passage of the *Parts of Animals*. A part of the passage from *DCMS* 27 where the character Aristotle portrays the educated man runs as follows:

> But since it is the function of the educated man (πεπαιδευμένου) to be able to (τὸ δύνασθαι) hit the mark (κρῖναι) what is present properly and not properly (τὸ δύνασθαι κρῖναι εὐστόχως τί καλῶς ἢ μὴ καλῶς) in the contributions of the speaker, and we believe the generally educated man is someone like that, then being educated is also being able to do the aforementioned. So, this is clear, that the correctly educated man must, in the case of mathematics too, demand from the mathematician correctness and his proper function, whether he rightly or wrongly creates his theory about them. For just as we consider the universally educated man is able to (δύνασθαι) judge (κριτικόν) about everything, so to speak, despite being one in number, similarly too about some delimited science (περί τινος ἐπιστήμης) there would be someone else who has the same disposition (τρόπον) as the one mentioned, about a portion. Hence it is clear that there must be certain such standards (τινας...ὅρους) in the study of mathematics too, with reference to which (πρὸς ούς) the educated man will accept the manner (τρόπος) of the proofs, independently of how the truth is, whether thus or otherwise. (Iamblichus, *DCMS*, 27, 84,21-85,11 tr. Hutchinson and Johnson, slightly modified)

The portrayal of the educated man seems to involve four aspects:

(i) Aristotle characterizes the educated man twice as someone who is able to (δύνασθαι) judge, which allows us to construe being educatedness as an ability.

(ii) Educatedness seems to be a 'discriminative' ability to judge (κρῖναι). The educated man is not, e.g., a mathematician, so he will not be able to judge

whether the deductions are right or not. But he will be able to judge successfully whether the arguments or demonstrations are formulated in the proper 'manner' (τρόπος) and direction.

(iii) From the remark that "it is clear that there must be certain such standards (τινας…όρους) in the study of mathematics, *too*" (my emphasis) by reference to which the educated man will perform his critical appraisals, it can be inferred that the educated man in an area will possess 'certain standards.' Here mathematics is given as an example discipline and Aristotle suggests that this is applicable also to the context of the *Protrepticus* which is not mathematical.

(iv) The educated man must be able to pass judgement on what is said properly or what is not (καλῶς ἢ μὴ καλῶς). Hence, a previous understanding of the standards and procedures of a science will function as the norms that guide the critical judgements of the educated man.

Two points are also of note: The discriminative ability could be general or domain specific. Someone might be educated universally, i.e., in all areas of inquiry or merely in a specific domain. Of primary importance for us, this discriminative ability is implicitly contrasted with scientific knowledge as the educated man is portrayed as someone who passes judgement on the manner of the proofs or demonstrations of the practitioner of a science, e.g., a mathematician, 'to a good approximation.' So, there is an implication that his knowledge is not *epistêmê*, i.e., scientific knowledge.

Aristotle seems to have reused his material from *DCMS* 27 almost identically in the opening passage of *PA* at i 1 639a1- a15. Since the context is natural science rather than mathematics, Aristotle has adapted the passage in relevant aspects. Those differences notwithstanding, the four features associated with the educated man in *DCMS* 27 can be recognized here:

(i) Science and educatedness have more clearly been identified as two *hexeis* (639a2: δύο...τρόποι τῆς ἕξεως). In *DCMS* 27, from Aristotle's phrasing of

the *ergon* of educatedness, I inferred that it is an ability. However, as Aristotle sometimes uses *dunamis* and *hexis* interchangeably, the point should obtain.

(ii) He reiterates the point that educatedness is a discriminative ability or disposition to pass judgement (639a5: τὸ δύνασθαι κρῖναι).

(iii) 'Certain standards' (639a12-3: τινας…ὅρους) are required to acquire this discriminative ability.

(iv) The educated man is expected to be able to hit the mark about what is said properly and what is not (639a4-5: καλῶς ἢ μὴ καλῶς).

The two additional points are similarly reiterated. First, educatedness can be domain-specific or universal (639a7-12). Second, educatedness is a discriminative ability that differs from science by its less rigorous form of knowledge (639a3-4). While the scientist can make proofs and demonstrations and hence, obtain scientific knowledge, the educated man can only understand those proofs and demonstrations and critically judge and appraise the manner those proofs have been made by virtue of 'certain standards' pertaining to the domain.

Now let us turn to our passage from T2 once again to see how the analysis made applies to T2:

> similarly, the politician must [1] have (ἔχειν) certain [3] standards (τινὰς ὅρους) taken from nature itself, i.e., from the truth by reference to which he [2] judges (κρινεῖ) what is just, what is good, and what is expedient. For just as in that area these stand out from all other tools, so too a law that is laid down most according to nature is [4] most proper (κάλλιστος). But it is impossible for someone who has not done philosophy (φιλοσοφήσαντα) and recognized (γνωρίσαντα) the truth to be capable of effecting this (55,1-55,7)

The analysis of the educated man we outlined by consulting *DCMS* 27, and *PA* i.1 seems to map onto this passage nicely.

(i) The politician must "have" (ἔχειν) certain standards. Although not every 'having' needs to be a reference to a disposition (*hexis*), the text allows this reading. Aristotle subsequently adds that without doing philosophy the politician will not achieve the identified task which reinforces this interpretation.

(ii) The politician will use a discriminative or critical judgement (κρινεῖ) to tell what is good, what is just and what is expedient.[36]

(iii) He will be able to make those judgements by reference to 'certain standards' (τινὰς ὅρους*)* taken from nature by being exposed to philosophy.

(iv) Owing to his discriminative ability the educated politician will thus be able to tell what laws are the most proper (κάλλιστος) prior to laying them down.

That the area the politician needs to be educated in is outside his own expertise, namely, in the domain of theoretical philosophy, is not an obstacle to our conclusion. In *DCMS* and *PA* i 1 Aristotle made a distinction between universal and domain specific educatedness. And as we know also from *NE* i 2 the politician is expected to be well-educated generally.[37] So, accordingly in *Protr*. x, he can acquire such a transdisciplinary discriminative ability concerning human nature without having to be an expert in natural philosophy. Now, although his knowledge is not *epistêmê*, the educated man possesses certain standards which I presume to be certain results, principles, or facts of a domain. If his knowledge was rudimentary, he would not be able to, e.g., pass judgement on the proofs of a mathematician or the causal explanations of a natural scientist. These are undeniably demanding tasks. Moreover, Aristotle's distinction between domain-specific and universal educatedness undermines a minimalist interpretation. If mere experience or rudimentary

[36] Cf. *EN* 1181b6.

[37] See *EN* 1094b27-1095a4 where Aristotle differentiates educatedness in general and in a domain (ἕκαστος δὲ κρίνει καλῶς ἃ γινώσκει, καὶ τούτων ἐστὶν ἀγαθὸς κριτής. καθ' ἕκαστον μὲν ἄρα ὁ πεπαιδευμένος, ἁπλῶς δ' ὁ περὶ πᾶν πεπαιδευμένος) and then suggests that his audience in political science should be well-educated generally.

knowledge was a sufficient condition for being educated, any sound person would readily be educated universally. Additionally, in *Pol*. iii 1 Aristotle enumerates three types of physicians; the ordinary practitioner, the master physician and thirdly, "the educated man (ὁ πεπαιδευμένος) in the art."[38] Aristotle says that "in all arts there is such a class; and we attribute the power of judging to them quite as much as to experts (ἀποδίδομεν δὲ τὸ κρίνειν οὐδὲν ἧττον τοῖς πεπαιδευμένοις ἢ τοῖς εἰδόσιν)" (1282a1-5). Note that although the educated man is not a practitioner of medicine and does not possess expert knowledge of the domain, Aristotle still identifies him as a type of physician.[39] Second, Aristotle stresses that we ascribe a discriminative ability not less to the educated man than to the professors of medicine which implies that he has a considerable amount of knowledge and is superior to an ordinary physician who presumably relies on some restricted know-how and experience.[40]

If the foregoing analysis of the educated man is correct, I submit that in *Protr*. x the politician that is expected to possess certain natural standards is the educated man (ὁ πεπαιδευμένος) who possesses theoretical knowledge to a considerable degree. In section two I have already argued for my claim (2) concerning how we should construe the 'nature' that is the source of the 'standards' mentioned in T2. I argued that we should take the 'nature' in question in connection with the human end, soul, and its parts by appealing to discussions in *Protr*. ix and x. Now I shall revisit the question of 'standards 'in light of the analysis of the educated man.

[38] Cf. Plato's two categories of physicians in *Laws* 720bff: "And these 'doctors' [assistant doctors] (who may be free men or slaves) pick up the skill empirically, by watching and obeying their masters; they've no systematic knowledge such as the free doctors have learned for themselves and pass on to their pupils."

[39] Lennox 2021 suggests that the educated physician in *Pol*. iii 1 is "akin to what today might be called a philosopher of medicine; and the person referred to in the *PA* i 1 passage as discerning about the inquiry into nature is akin to a philosopher of science" (144, n.6).

[40] In *Pol*. viii 6 with regard to musical education Aristotle says that "It is difficult if not impossible, for those who do not perform to be good judges of the performance of others" (1340b24-25) and "they who are to be judges must also be performers (ἐπεὶ τοῦ κρίνειν χάριν μετέχειν δεῖ τῶν ἔργων)"(1340b35-6), and only then can one judge and appreciate what is good (1340b38: δύνασθαι δὲ τὰ καλὰ κρίνειν) with the knowledge that they acquired in their youth.

'The standards' revisited

Consider the passages in *Protr*. x, *DCMS 27* and *PA* i 1 which contain the term ὅρος *once again*. In all these occurrences Aristotle consistently uses *pros* plus accusative case in conjunction with 'certain standards.' Let me call this *the pros locution* for convenience.

> *Protr*. x: […] similarly, the politician must have certain standards (τινὰς ὅρους) taken from nature itself, i.e., from the truth by reference to (πρός) which he judges what is just, what is good, and what is expedient.
>
> *DCMS* 27: […] there must be certain such standards (τινας…ὅρους) in the study of mathematics too, with reference to (πρός) which the educated man will accept the manner of the proofs, […]
>
> *PA* i 1: So, it is also clear for the inquiry into nature, there should be certain standards (τινας…ὅρους), such that by reference to (πρός) them one can appraise the manner of its proofs […]

Now, in *Pol*. vii there are several passages where Aristotle provides guidelines to the politician about the nature of the human end, parts of the soul, etc. with reference to which he should design education and lay good laws to instill virtue in citizens. Aristotle frequently uses *the pros locution* when he invokes those natural facts or claims (concerning human nature and soul) with reference to which the legislator can discriminate how he should proceed in those matters. However, the term ὅρος doesn't occur there and thus Aristotle does not explicitly identify those facts or claims concerning human nature as standards. Nevertheless, these passages in which *the pros locution* occurs are worth considering for at least two reasons. First, the context that centres around the legislator who should consider certain facts and claims concerning human nature in his political endeavours is quite similar to what we have in *Protr*. ix and x. Second, a version of the argument I considered at *Protr*. ix. 51,19-52,4 to support

my reading of 'nature' occurs in a parallel way at *Pol*. vii 15.1333b12-26. This passage emerges as a response to a question in the preceding discussion, namely, "whether people are to be educated first by means of reason or by means of habits" (1334b8-9) in the ideal city. Aristotle starts his response by saying that "in men reason and mind are the end towards which nature strives (ὁ δὲ λόγος ἡμῖν καὶ ὁ νοῦς τῆς φύσεως τέλος), so that the birth and training of our habits ought to be ordered with a reference to them (ὥστε πρὸς τούτους τὴν γένεσιν καὶ τὴν τῶν ἐθῶν δεῖ παρασκευάζειν μελέτην)" (1334b14-16). Then he elaborates in some detail on the parts of the soul and identifies what part is prior in generation to the other. He draws the conclusion that the non-rational part of the soul—he counts spirit, wish and appetite as belonging to that part—is prior in generation and reason and understanding (ὁ δὲ λογισμὸς καὶ ὁ νοῦς) develop as the children grow older (1334b22-24). Finally, he links this conclusion to the question asked in the previous passage concerning the order of education by saying that "For this reason, the care (ἐπιμέλειαν) of the body ought to precede that of the soul, and the training of the appetitive part should follow; none the less our care of it must be for the sake of the reason, and our care of the body for the sake of the soul" (1334b24-26). So, Aristotle urges that the stages of human psychic development and the natural end of human beings for the sake of which they have come to be should be attended to by the politician in designing laws and education. In addition to being remarkably parallel to the passage at *Protr*. ix. 51,19-52,4, Aristotle employs *the pros locution* in conjunction with a claim about human nature as quoted above.

The use of *the pros locution* with facts pertaining to the human soul, human excellences, and the natural end of human being is not restricted to that passage in those books devoted to the best city in the *Politics*. Elsewhere he provides a detailed portrayal of the human soul, its parts, the virtues of different parts and excellent activities that are fitting for those parts (1333a16-35). Then he adds that "The politician should frame his laws with reference to all these points (πρὸς πάντα); he should

consider the parts of the soul and their functions, and above all the better and the end" (1333a37-39; see also 13333b5-10). In those passages Aristotle apparently uses *the pros locution* to flag 'standards or criteria' that the good person or politician ought to attend to in his actions and legislative activities both in the *Politics* and the *Protrepticus*.[41] *Pol*. vii is also useful in another way. It provides us with some example cases that reveal how these natural standards could be utilized in acting and legislating.[42]

For instance, just as human soul is divided to different parts some of which are naturally better and more honourable, human actions are to be so divided; in this sense, business, war, or actions that aim at what is useful and profitable should be for the sake of leisure, peace, or honourable actions (1333a16ff). Again, a good legislator should not instil only one of the virtues that pertains to one part of the soul, e.g., courage as Spartans did, but all the virtues and above all the virtues of the rational part of the soul. Aristotle complains about the Greeks who sought profit and military power above all. Subsequently, he proceeds to direct criticism to Spartan legislators as well as the writers such as Thibron who praised the Spartans' constitution and legislators. Spartans are reputed to be the best governed, but their legislators rested their constitution and laws on the erroneous basis, so to speak, wrong standards (1333b10-1334a10). Observe that in *Protr*. x after T2 Aristotle highlights that the politicians who lay down laws and perform actions by looking at or imitating actions or political systems of such states as the Spartan or the Cretan are not virtuous politicians (*Protr*. x.55,16-19). I take him to mean that such politicians take their

[41] Note also that one of the places where Aristotle mentions the concept of the educated man is the *Politics* as we already discussed.

[42] Johnson 2015, 183–185 claims that in *Protr*. x the *horoi* (he prefers 'instruments' instead of 'standards') the legislator derives from nature include natural scientific and metaphysical principles such as "those which are incapable of existing without each other must unite as a pair." He thinks Aristotle used this principle in *Pol*. i 2 to discuss the combinations of male/female, slave/master, etc. Although that might be true, I think in the immediate context of *Protr.* x those standards need primarily to be associated with the human soul.

standards not from an understanding of human end and soul parts and functions but rather from the wrong sources.[43]

In light of the foregoing, I conclude that in T2 in *Protr.* x, the standards that the accomplished legislators are expected to take from nature to lay down the most beautiful laws and judge what is just, etc. are concerned with the theoretical knowledge and understanding of the human end, soul, and its certain aspects. [44] The remark in T2 which reads that "it is impossible for someone who has not done philosophy and recognized the truth to be capable of effecting this" (55,6-7) confirms this conclusion. Also, another passage from *Politics* vii is noteworthy. Aristotle says that "what is said by the physicians and natural philosophers about generation should also be studied by parents themselves" (1335a39-40).[45] If Aristotle could even enjoin married couples to study or observe the sayings of the physicians and natural philosophers, the requirement of well-educatedness of the master politicians in natural philosophy and other areas should not surprise us. The politicians will have

[43] See Leunissen 2015, who argues that in the *Politics* Aristotle discusses the arrangements the statesmen should make in producing the best possible city for the development of virtue by checking them against what is possible and desirable given the natural traits human have. "For instance, statesmen should allow citizens to have a certain amount of private possessions, on the grounds that humans possess a natural love of the self, which 'nature did not give in vain' to them and therefore needs to be taken into account (*Pol*. 2.5.1263a38–b3)." (223)

[44] In the *Nicomachean Ethics* (1138b21–25; 1138b32–35) and *Eudemian Ethics* (1249a24–1249b3; 1249b16–19) Aristotle employs the term *horos* to arguably highlight the standard or criterion of practical thinking and actions. Presumably under the influence of these passages and following a completely different route Walker 2010 argues that 'contemplation of the divine objects' must be 'the standard' against which human practical thinking should be measured in *Protr*. x (2010 *passim*). In a later work where he uses the aforementioned *EE* and *EN* passages extensively, he recognizes that unlike those passages, in *Protr*. x the Greek term used as 'standard' is in fact in the plural form: *horoi*. So, Aristotle mentions 'standards' not 'a standard.' He then tells, in my view, an unsatisfactory and farfetched story about how 'contemplation of the divine objects' can function as 'standards' of practical thinking in the plural in order to reconcile the *Protrepticus* with later treatises on this point (2018, 150). I think my account which includes not only the ultimate end of human beings but also certain aspects of their soul, the stages of psychic development etc. as the reference of those plural *horoi* for the virtuous legislators fits the context of *Protr*. x more adequately. Moreover, Aristotle consistently uses 'certain standards' in connection with the educated man as I showed in the analysis of various texts. Hence, we should resist the temptation to assimilate different occurrences of the *horos*, and instead, we should take Aristotle at his word in the *Protrepticus*. The fact that my interpretation can explain Aristotle's consistent use of the *horos* in plural provides further evidence in support of my construal of *Protr*. x.

[45] δεῖ δὲ καὶ αὐτοὺς ἤδη θεωρεῖν πρὸς τὴν τεκνοποιίαν τά τε παρὰ τῶν ἰατρῶν λεγόμενα καὶ τὰ παρὰ τῶν φυσικῶν·

to know what saying of the physicians and natural philosophers to provide to couples. They should have vast knowledge without having to be physicists just as physicians are required to have vast knowledge of the body without having to be natural scientists or natural philosophers themselves.

Hence in the context of political science, there seems to be a division of labor between the natural scientist or natural philosopher and the politician who is supposed to be well-educated. While the intellectual achievements of the philosopher supply the source of theoretical knowledge required for the politician, the well-educated politician is thus able to perform better actions and make more proper laws by benefitting from the philosopher's knowledge of nature. However, Aristotle does not rest content with stressing the benefit of theoretical philosophy for the politician to become good in his political and legislative endeavours. In *Protr*. x Aristotle seems to be attributing to the philosopher the capacity of performing a substantial practical role, as well. After T2 which we have extensively examined so far, Aristotle makes an important remark about the philosopher. He says that:

> *But it is clear that the philosopher is the only craftsman to have both laws that are stable and actions that are correct and beautiful*. For he is the only one who lives looking at nature and at the divine and, just as if he were some good navigator who hitches the principles of his way of life onto things that are eternal and steadfast, he rides at anchor and lives life on his own terms. (55,23-56,2 my emphasis)

This passage suggests that the philosopher is in fact the best possible politician or legislator. His political expertise clearly surpasses that of any politicians who are merely well-educated in philosophy.

That said, as mentioned before Aristotle's arguments and terminology in particular in *Protr*. x have led Jaeger and others to conjecture that Aristotle invokes Platonic ontology and hence, employs a division of philosophy along Platonic lines in the *Protrepticus.* This passage in which the philosopher is depicted as the "only

craftsmen to have both laws that are stable and actions that are correct and beautiful" can indeed be interpreted as supporting the idea of the philosopher-king in whom theoretical and practical knowledge is merged as understood in the *Republic*.[46] On the other hand, as we have already discussed so far, there is no conclusive evidence in support of the claim that the 'nature' and 'the standards' Aristotle invokes in *Protr*. x are allusions to Platonic Ideas. So, neither do I see any compelling reason to take *sophia* and *phronêsis* as referring to the exact same type of knowledge which would align Aristotle strictly with Plato on that count.[47] If that was the case, Aristotle would not assign a subsidiary value and role to *phronêsis* which is recognizably akin to practical wisdom in the *Protrepticus* as can be seen in the passage below:

> Some acts of thinking are choiceworthy solely because of the contemplation itself and are more estimable and better than those useful in relation to other things. The contemplative ones are estimable because of themselves, and the *sophia* that is characteristic of understanding (*nous*) is choiceworthy for them, but *phronêsis* is choiceworthy for the sake of practical ones. The good and the estimable, then, lies in acts of contemplation in accord with *sophia*, but certainly not in acts of contemplation of every kind. (B27, 35,5-35,9, tr. Düring, my emphasis)[48]

Nevertheless, even if I am right about these points on how we should understand 'nature' and 'the standards' and the distinction between *sophia* and *phronêsis* in the *Protrepticus*, which would in return discard an idea of the philosopher king along

[46] For instance, in *Republic* vi where Socrates defends philosophy against the charges of uselessness, he employs a terminology that resembles Aristotle's in *Protr*. x. To give just some examples, he says that "He [the philosopher] looks at and studies things that are ordered and stable…he imitates them and tries to become as like them as he can...as they work, they'd look often in each direction, towards the natures of justice, good, moderation, and the like" (500c7-d1, tr. by Grube).

[47] See Jaeger 1948 85-90, where he thinks that in *Protr.* x, the knowledge of nature understood as the knowledge of Platonic forms is the politician's knowledge of the just and useful. However, although Aristotle uses the concept of *phronêsis* in a broad sense in the *Protrepticus* to refer to both practical and theoretical intelligence, Aristotle at times uses *sophia* as well which suggests that he as in mind a certain distinction between *sophia* and *phronêsis.* See note 12 for some evidence that challenges Jaeger's interpretation that equates *sophia* with *phronêsis* in the *Protrepticus*.

[48] See Devereux 2014, 160-162, who defends a two-fold division of philosophy in the *Protrepticus* on the basis of this passage.

Platonic lines, in the passage cited above at *Protr*. 55,23-56,2 Aristotle still wants to assign a substantial practical role to the philosopher. He is said to be the "*only craftsman to have both laws that are stable and actions that are correct and beautiful.*" Here apparently Aristotle doesn't reject completely the possibility of there being a philosopher-king as someone who is deeply versed in issues in theoretical as well as practical fields and who is the best possible candidate to draw up the best legislation, and then to provide the best governance by his excellent and unsurpassable actions.

It is likely that Aristotle sees this as a rare possibility and thinks that most cities will have to be content if they are given a constitution and then governed by politicians who are well-educated in philosophy. His articulation of the requirement of doing philosophy for the politicians which we have already examined in detail seems to support this point. Those who are "concerned with the virtues of the soul and pretending to profess to know about the success and failure of the state…require philosophy much more" (*Protr*. x. 54, 21-22) as they [good legislators] must be experienced with nature…indeed much more [than doctors and trainers]." (54,17-18) We have already established that here Aristotle is talking about the good politician well-educated in philosophy. Moreover, by mentioning those who profess to know about the practical matters of the state Aristotle seems to be suggesting that they already have some knowledge of the just and useful and that they will further benefit from additional experience with nature that will be provided by the philosopher.

While the possibility of the well-educated politicians who benefit from philosophy can be practically more viable, nonetheless, Aristotle seems to take seriously the Platonic heritage and he seems to hold the idea of the philosopher-king—albeit a modified version of it—in the *Protrepticus*. Hence, what we have here is not the strict bifurcation of the two best lives of the *EN*, the one of theoretical activity, the other of exercising all the virtues—according to which there is just no way to have them both and that there is no theoretical possibility for the emergence of philosopher-kings. In his defense of philosophy in the *Protrepticus* he seems to go full throttle,

claiming that people engaged in philosophy, and knowing philosophy to the full are the best legislators and rulers. Note, however, that it would be premature to draw up intricate lines of development on the basis of this piece of evidence. This is because even if he already had something along the lines of the division of lives of *EN*, it wasn't mandatory for him to disclose all the details of his stance. In this encounter of the *Protrepticus* showing the crucial option of politicians having proper philosophical education— which may turn out to be the only available option— and then giving further clout to philosophy by giving a quick nod to real philosophical experts at the helm of the state (even if that is not a real option)—is more than adequate.

4.5. From the *Protrepticus* to the *Nicomachean Ethics*

In section 3 I have shown that the theoretical knowledge of some claims or facts concerning the human end, the human soul, and its parts is required for the good person or legislator for his practical endeavours. I argued that the scope of this knowledge is sufficiently broad which could be gained by doing philosophy to some extent, but which is not *epistêmê*, i.e., scientific knowledge. Without the need to consult later works intensively, the resources of *Protrepticus* have proved sufficient to argue for this conclusion.[49]

[49] To respond to criticisms of anachronism I would suggest considering the closing pages of *Phaedrus* to show that the historical context in which Aristotle philosophized already involves similar ideas concerning the non-minimalist requirement of theoretical knowledge of the soul for practical purposes. According to the *Phaedrus* a true rhetorician needs, first, to know the truth concerning the subject matter he is going to talk or write about and second, to understand the nature of the soul and to determine which type of speech fits which type of soul (277bff). To gain the knowledge pertaining to the nature of the soul, the rhetorician should undergo a tough training similar to the physician who pursues a similar μέθοδος for gaining knowledge of the body which is different from "an empirical and artless practice" (270b6: μὴ τριβῇ μόνον καὶ ἐμπειρίᾳ ἀλλὰ τέχνῃ). The rhetorician has to understand "the nature of the whole" (270c2: ὅλου φύσεως) of the soul just as Hippocrates would think the same for the body (270c3-5). Any one who teaches the art of rhetoric will have to first and foremost "describe the soul with absolute precision and enable us to understand what it is." (271a4-8) Socrates declares that "proceeding by any other method (μέθοδος) would be like walking of the blind." That said, I think Aristotle's account requires a less rigorous study than portrayed by Socrates. It is sufficient to be 'well-educated' in the matters of soul for Aristotle's politician. He doesn't need to understand the nature of the human soul with 'absolute precision.' Arguably Aristotle's reservations about 'precision' in *EN* i 13 should be

In this section, I will defend point (4) which claims that the non-minimalist requirement of theoretical knowledge for the good person or politician is retained in the later treatises. As I will present in a moment, the evidence from later works is also intimately connected to our texts in *Protr*. x. This will further corroborate my interpretation of *Protr*. x.

EN i 13 and knowledge of the soul

A well-known passage at *EN* i 13 which is strikingly parallel with T1 highlights our claims (2) and (3) that we discussed in the previous two sections:

> The true political expert (ὁ κατ' ἀλήθειαν πολιτικός), too, is thought to have studied this [i.e., happiness] above all things; for he wishes to make his fellow citizens good and obedient to the laws…But clearly the virtue we must study is human virtue; for the good we were seeking was human good and the happiness human happiness. By human virtue we mean not that of the body but that of the soul; and happiness also we call an activity of soul. But if this is so, clearly the political expert must know some knowledge about the soul (εἰδέναι πως τὰ περὶ ψυχῆς), as the man who is to heal the eyes must know about the whole body also; and all the more since politics is more honourable and better (τιμιωτέρα καὶ βελτίων) than medicine; but even among doctors those who are refined (χαρίεντες) spend much labour on acquiring knowledge (γνῶσιν) of the body. The political expert, then, must study (θεωρητέον) the soul, and must study it with these objects in view, and do so just to the extent which is sufficient with regard to our research (ἐφ' ὅσον ἱκανῶς ἔχει πρὸς τὰ ζητούμενα); for further precision is perhaps something more laborious than our purposes require. Some things are said about it, adequately enough, even

understood with reference to such a deeply rigorous study and knowledge of the human soul. For a recent analysis of this passage for methodological discussions, see Lennox 2021, 69.

in our popular works (ἐξωτερικοῖς λόγοις), and we must use these (*EN* i 13.1102a7-26, modified)[50]

As in T1, Aristotle proceeds here by drawing an analogy between the body and the soul, their virtues, the craftsmen that are responsible for their virtues and the knowledge they require. Here we read once again the claim that the politician requires more knowledge than the doctor. Aristotle's remark that the politician should study the soul to the extent it is sufficient for his political engagements has led some scholars such as S. Broadie and G. Salmieri to claim that a merely rudimentary understanding of the human soul is sufficient for the politician to carry out his task.[51] Nevertheless, Aristotle's emphasis on the requirement of knowledge for the refined doctor seems to resist such an interpretation. We are told that even the refined or sophisticated doctor spends much labor and a great deal of study in order to acquire this broad understanding pertaining to the whole and parts of the body. This implies that the politician who is additionally expected to require more knowledge will be in need of even broader and more complex knowledge of the human soul and its parts.[52] The consistency and continuity between T1 and *EN* i 13 on that score is evident. Aristotle's identification of doctors in question as 'refined or sophisticated' is revealing further evidence that is the subject of the next section.

Parva Naturalia and the refined doctors

Observe that in T1 in *Protr*. x Aristotle describes the doctors that would agree that they need philosophical knowledge of the body to perform their tasks effectively as sophisticated (54,13: κομψοὶ) doctors. Similarly, in *EN* i 13 passage above the refined (1102a22: χαρίεντες) doctors are expected to spend much labor on acquiring the

[50] See *EN* 1138b35–1139a8 where Aristotle makes a reference to *EN* i 13 to carry out his investigation now into the rational soul and its parts to distinguish different intellectual virtues.
[51] Broadie, 1991, 61 and Salmieri 2019, 334. n.25. See note 49.
[52] On the analogy drawn here between the physician and the political expert see Gottlieb 2009, 178 who discusses that the psychological knowledge required is more complicated and broader than what goes by the name of folk psychology which could be gained by observation and experience.

knowledge of the body. The idea seems to be that the sophisticated and refined doctors who want to perform their profession to the fullest degree need to have sufficiently broad theoretical knowledge and understanding of the human body, its parts, their functional relations and so on to treat their patients properly and restore their health. In this sense, a good doctor is not someone who follows the instructions of a colleague or directions of a supervisor like a medical assistant or who treats his patients on the basis of some limited ability and practical experience.[53] Otherwise, his condition would be like the doctor or rhetorician of the *Phaedrus* whose practice would be limited to some know-how and experience which Socrates likens to the 'meandering of a blind man' (270e1-2).

Two passages from Aristotle's *Parva Naturalia* will shed more light on the source and scope of the theoretical knowledge that the 'sophisticated' and 'refined' doctors need. That will in return allow us to see more adequately the case of the politician who is said to require knowledge of the soul even much more in *EN* i 13 (and in *Protr*. x):

> The scientist should grasp the first principles of health and disease, for there can be no health or disease in lifeless creatures. Thus, generally speaking, most natural scientists end with a discussion of medicine, and most of the doctors who research their subject more philosophically (φιλοσοφωτερος) start on the basis of principles from the study of nature. (*Sens*. 436a17-b1)

> Concerning health and disease, not only the physician but also the physicist must, to a certain extent, provide explanations. To what extent they differ and theorize different things must not be neglected, since it is a fact that their objects, at least to a certain extent, are coterminous. For those doctors who are sophisticated (κομψοί) and inquisitive (περίεργοι) say something about nature,

[53] See *EN* 1180b19-22: "It will be perhaps agreed that if a man does wish to become a master of an art or science he must go to the universal and come to know it as well as possible." Note that the arts mentioned in the discussion include medicine, legislation, and gymnastics. See Kraut 2002, 287-288 on the distinction between different kinds of doctors, builders, etc. Cf. *Pol*. 1281b38-1282a7; *PA* 639b12-20.

> and consider it important to draw their principles from it, while the most refined (χαριέστατοι) of the physicists complete their investigations taking them so far as the principles of medicine. (*Resp*. 480b21-30, slightly modified)[54]

First, observe the use of the adjectives 'sophisticated' and 'refined' to qualify the doctors, as in T1 and *EN* i 13. Here Aristotle additionally describes such doctors as inquisitive and philosophical. Scholars such as van der Eijk 2005 and Lennox 2005 have commented that the refined and sophisticated doctors who research their subject philosophically are the ones who take over certain physical principles concerning the body and organs from natural science. They borrow this knowledge from natural science because the study of health and disease requires causal principles regarding the operations of organs. The distinguished natural philosopher will focus on the healthy functioning of the organism as well as the causes of the malfunctioning of the organs. The philosophical doctor, on the other hand, will study and follow the natural philosopher for the useful causes and principles for his domain.[55] Thanks to his inquisitive and philosophical mind the refined doctor will, thus, be well-versed about the causes of the diseases and health, will be successful in his prognoses and diagnoses and the effects of his prescriptions on his patients. In that, he resembles the 'master craftsman' (ἀρχιτέκτονας) of *Meta.* i 1 who possesses a real art and hence knows the causal explanation of the things in contrast to the 'handworker' who merely acts on the basis of experience and habit (981a30-981b4; cf. *Pol*. 1282a3).

Now let us return to the politician of *EN* i 13 and T1. Recall that in those arguments Aristotle ranked the good politician higher than the refined doctor in terms of the knowledge of nature they require. The foregoing analysis revealed that the refined or philosophical doctor is someone who stretches his discipline to its edge to

[54] I follow the translation of both passages in Johnson 2012, 108-109 with slight modifications. Cf. also *PA* 653a1-3, 8-10.
[55] Lennox 2005, 67.

take over principles and causes of health and disease from natural philosophy.[56] These are 'the facts' in the language of the *APo* i 13 and to study 'the why' of these facts falls within the domain of the natural philosopher.[57] In this sense the physician doesn't have to be a natural philosopher who makes proofs, demonstrations and so forth.[58]

Inasmuch as the politician is ranked over the doctor in this regard, whatever we say about the refined and sophisticated doctor in terms of the scope of his knowledge of nature obtains all the more so for the good legislator or the politician. Similarly, a good politician is not going to be someone for whom practical experience is sufficient and who follows the lead of other politicians and states. As Aristotle tells us "If someone either lays down laws for states or does his deeds by looking at and imitating other human deeds or political systems, whether the Spartan or that of the Cretans or of any such a state, he would be neither a good legislator nor a virtuous politician" (*Protr*. x. 55,16-22).[59] To perform his *ergon* both qua an acting individual

[56] This might sound like even more knowledge than a simply educated man in a domain would get. However, these two need not exclude each other. In any case, the need for more knowledge would make my case for a non-minimalist reading even stronger.

[57] *APo*. 78b34-79a13. See Lennox 2005, 68 in support of this point.

[58] This seems to be a case where a certain practical/productive science is subordinate to a more general science. By taking over some of its foundational principles about health and disease from natural philosophy, medicine seems to be subordinate to natural philosophy. And this is arguably an example of how theoretical knowledge is said to be useful for practical matters as suggested in *Protr.* x. Lennox 2005, 67-8 says that it is likely that Aristotle is thinking of the relationship between medicine and theoretical knowledge of nature as being similar to the relationship between optics and geometry or harmonics and arithmetic. Lennox writes that "medicine does not (on Aristotle's model) investigate the causes of its phenomena natural philosophy does that. To put it in the language of the *Posterior Analytics*, the fact and the reason why are in this case studied by different sciences. The causes of disease are not to be found in the genos of medicine, but in the genos studied by the natural philosopher" (68). In a later article, he puts his point more strongly: "Elsewhere I have argued that [these three passages] suggest that [Aristotle] did see the relationship between medicine (a productive science) and the science of nature on the subordinate science model" (2010b, 12 b.25). Cf. an alternative interpretation of these passages in *Parva Naturalia* in Judson 2019, 184-186. The question that should concern us here is whether ethics is in an analogous way subordinate to some theoretical sciences. Although this chapter seems to offer an argument that might be supportive of such a relationship, the investigation of this question fully is beyond its scope.

[59] Cf *EN* 1181a-b where Aristotle complains about the sophists who classified political science with rhetoric or inferior to it and who thought it easy to legislate by collecting laws that are considered well by people.

and qua a politician well,[60] he needs to be experienced about nature, i.e., have a theoretical knowledge of human soul, its parts, and virtues to a considerable degree.

If the good politician requires even 'more knowledge' than the philosophical doctor, it seems reasonable to conclude from the analogy that the good politician will also take over certain factual knowledge concerning the human soul and its parts from natural philosophy. That said, just as the doctor need not be a natural philosopher who knows 'the why' of the 'the facts' concerning human anatomy and its functioning, similarly, the politician need not be an expert on the human soul. Nevertheless, his knowledge will not be rudimentary or superficial that could be gained through observation and experience. Just as the refined doctor who studies natural philosophy is said to be a philosophical doctor,[61] the good politician who studies nature is going to be a philosophical politician whose theoretical knowledge of the human soul and its parts is sufficiently broad and complex.[62]

4.6. Conclusion

In this chapter, I have appealed to the *Protrepticus* to bring to light one of Aristotle's commitments concerning the utility of theoretical knowledge for political science. As *Protrepticus* is intended to be an exhortatory work to doing philosophy, Aristotle openly enunciates the role and use of theoretical philosophy in particular as a reaction to Isocrates and like-minded people who charge theoretical philosophy with

[60] At *EN* vi 8 *phronêsis* and political science are said to be "the same disposition" but "their being is different" (1141b23-4). Presumably, he means that the same disposition serves different functions, in one case it is concerned with the individual agent with respect to his own life and in the other, that of the city.

[61] Lennox 2005, 67 writes that "Given the emphasis in Greek Medicine on the role of such environmental factors such as climate and bodies of water, medicine will presumably not look solely to the study of animals and plants for its principles, but also to meteorology." Cf. Aristotle's advice for consulting the writings of natural philosophers for favourable climate conditions for coupling and giving birth (*Pol*. 1335a36-1335b2). See Tracy 1969, 69-71 on the requirement that the ancient physicists need to have both an understanding of health and disease and the roles diet and physical environment (waters, temperature, climatic cycles etc.) play on health.

[62] The politician well-educated in philosophy should be distinguished from the philosopher who is the best possible politician that we mentioned at the end of section 4.4.

uselessness. Drawing on 'the utility argument' I have argued for the claim that in the *Protrepticus* Aristotle is committed to the view that political science depends on theoretical philosophy in a recognizable way. I have defended this claim by showing first that while Aristotle coherently considers theoretical knowledge as intrinsically valuable and choiceworthy as an end in itself (even if no other benefit comes about as a result of it), from the perspective of the *theôria* itself, it is considered useful accidentally. Second, I have shown that Aristotle thinks theoretical knowledge of the human end, soul and its parts is a requirement for the good person or politician to perform fine actions and lay down good laws. The utility of theoretical knowledge gains a different modality from the perspective of the acting person or politician. It is essentially useful for him to be effective as a good law-giver and ruler. With regard to the source and scope of that knowledge, I have argued that not any rudimentary amount of theoretical knowledge that could be gained by observation or experience will be sufficient. The good person or politician needs to have the epistemic state of the well-educated man who could discern what is proper or what is fine with reference to certain standards taken from nature, that is, from theoretical philosophy that concerns the human end, soul, and its parts. Finally, I have shown that Aristotle keeps his commitment to the utility of theoretical philosophy and retains his non-minimalist requirement for theoretical knowledge for the good person or politician in his later works.

I have also argued that in the *Protrepticus* Aristotle takes the philosopher to be the best possible politician whose expertise surpasses that of any politicians that are well-educated in philosophy. In defense of philosophy, he seems to claim that people engaged in philosophy and know philosophy to the fullest are the best rulers. So, his exhortation to philosophy seems to be along two lines: to be well-educated in philosophy so that one can use it in politics, and to do philosophical research—which, however, doesn't exclude being engaged in its practical application.

Because Aristotle is less articulate about the utility of theoretical philosophy in our practical lives in his later treatises, this aspect of Aristotle's thought has been overlooked and has not been acknowledged in debates concerning the relationship between Aristotle's political science and theoretical works. Thanks to the groundbreaking achievements of scholars who have authenticated *Protrepticus*, the utility argument allows us to consider the debate in a new framework and construe this relationship in light of one of Aristotle's convictions concerning the usefulness of theoretical philosophy in our lives

5. Aristotle on Natural Slavery

5.1. Introduction

Aristotle believes that some people can be enslaved without injustice on the basis of the nature they have. He clearly defends this view in his account of natural slavery in *Politics* i. Nevertheless, the question of how we should understand the 'nature' ascribed to the slave is a matter of contention. Most readers believe that Aristotle justifies the exclusion of the natural slave from the political and good life on the basis of their irreversibly defective nature. Yet, while some of these readers think that Aristotle takes the slave as a legitimate human being, some others think that the slave is in fact considered subhuman and thus aligned with animals. On the other hand, a minority of scholars have disputed the standard view entirely and claimed that the slave is in fact a legitimate human being who is endowed with the same capacities at birth as the other free citizens.[1] They think that the reasons that qualify some people as natural slaves are not to be sought in their originally defective nature but in their later actions and habituation. Hence, in contrast to the standard view, they have argued that the nature of the slave is indeed reversible. In this chapter, I will critically examine and reject two strikingly opposing positions, namely, the view that the natural slave is a subhuman with an irreversibly defective nature and the view that the natural slave is a legitimate human being with wasted potentialities, in a state that is however reversible. I will instead propose that Aristotle understands the slave as a legitimate human being who is, nevertheless, endowed with an ineliminable deficiency.

[1] Despite some distinctive nuances that separate their views, see for example, Lear 1988; Schofield 1990, 1999; Garnsey 1996; Kraut 2002; Heath 2008; Karbowski 2012; Pellegrin 2013; Kamtekar 2016; Leunissen 2017 and Anagnostopoulos 2018 as the defenders of the first interpretation. For the second interpretation see e.g., Frank 2004 and Bodéüs 2009, which we will also examine extensively in section 5.2.

Although a significant portion of *Pol.* i is devoted to the discussion of slavery, Aristotle is not interested in slavery as such and hence, the discussion of slavery seems to be incidental to his major concern, namely, the diversity of political rulership.[2] He opens *Pol*. i 1 by declaring that the political state which is the most supreme of all associations also aims at the most supreme of all goods (1252a4-6). The very next thing that he pronounces is that "those…who think that the natures of the statesman, the royal ruler, the head of an estate and the master of a family are the same, are mistaken; they imagine that the difference between these various forms of authority is one of greater and smaller numbers, not a difference in kind" (1252a7-10).[3] Hence, the Platonic idea of the unity of rulership that Aristotle makes his target in fact motivates the inquiry from the outset.[4] He refers to this view at two other critical junctures throughout *Pol*. i. The second reference to the idea of the unity of rulership will unsurprisingly occur right before Aristotle starts to discuss natural slavery at the end of *Pol*. i 3.1253b16-20. Finally, after he finishes his analysis of natural slavery in chapter 6, he concludes by saying that "From these considerations it is clear that the authority of master over slaves is not the same as the authority of a magistrate in a republic, nor are all forms of government the same as some assert" (1255b16-19). The analysis of slavery, thus, seems to be part of the bigger project of undermining the Platonic view as well as the view held by 'many people' who think that all power is by nature despotic (*Pol*. 1324b32). Aristotle's ultimate goal seems to gear the inquiry towards one of the most important ideas he holds in political philosophy, namely, the idea of political rule where a free man rules over other free and equal subjects (*Pol*. 1277b7).[5]

[2] On this point I agree with Schofield 1990 *passim*, Nichols 1991, Heath 2008, 244 and Pellegrin 2013, 93.
[3] Unless stated otherwise with occasional modifications all the *Politics* quotes are from Rackham, H. 1932. *Aristotle: Politics*. Loeb Classical Library 264. Harvard University Press.
[4] A passage in the *Statesman* seems to be Aristotle's target: "Then shall we posit the statesman and king and slave-master, and the manager of a household as well, as one thing, when we refer to them by all these names, or are we to say that they are as many sorts of expertise as the names we use to refer to them?" (258e7-11, tr. Rowe) See Depew 2019 for a comprehensive comparison and analysis of Aristotle's *Politics* and Plato's *Statesman* on that count.
[5] Cf. Ober 2001 and Leunissen 2017, who seem to believe that Aristotle's purpose is to rationalize actual slavery. See Ambler 1987, who challenges this view.

Since Aristotle is not interested in the phenomenon of slavery as such and provides a sketchy theory as a means to examine and understand different types of rule, the account of natural slavery includes certain gaps and some apparent inconsistencies. For instance, as Pierre Pellegrin notes, although in the biological texts, Aristotle thinks that some animals have foresight and are 'practically wise' in some sense and hence "what goes for animals certainly goes for slaves," Aristotle does not address it when he advances his account of natural slavery.[6] Regarding the incoherent claims, Wayne Ambler writes that "Aristotle seems to suggest not only that the strict standards for natural slavery are rarely or never met in actual practice but also that they are incoherent even in speech. They seem to require that the slave be human, but that he be as far from his master as are the beasts; that he have no craft but that he be useful; that he be as if a natural part of his master but that he be separable from his master."[7] When coupled with Aristotle's obscure and condensed manner of philosophical argumentation, the gaps and apparent inconsistencies among his claims concerning slavery have made the subject of slavery a minefield for those who try to interpret this topic. There is no consensus among scholars about how we should understand Aristotle's account and thus the ethical and political implications of his account are hotly disputed.

In this chapter I am interested in how we should understand the 'nature' of the slave as Aristotle outlines it in *Pol*. i. I believe that without a solid understanding of what exactly the conception of natural slavery amounts to, we might be tempted by some prevailing interpretations that either aim to exonerate Aristotle or condemn him on this ethically outrageous matter on the basis of a prejudiced reading. In an attempt to resist such temptations, this chapter will challenge two prominent interpretations to advance a more satisfactory account by a careful reading of Aristotle's text. Hence the primary purpose of this chapter is a negative one and it will be in dialogue with

[6] Pellegrin 2013, 112.
[7] Ambler 1987, 400. See also Schofield 1990, Smith 1991, and Garnsey 1996.

certain writers whose interpretations represent influential readings of Aristotle. By engaging with those views and undermining their arguments, in other words, alongside this negative project, a new and improved interpretation of Aristotle's conception of natural slavery will emerge.

In what follows I shall consider and assess two prominent kinds of interpretive approach with regard to the 'nature' of the natural slave each of which has some merit but fails to represent Aristotle's account accurately. According to the first of these approaches, Aristotle considers the natural slave as a human being whose rational deficiency is eliminable. On this reading, the slave is not born with an impairment, and his rational deficiency is caused by his actions and later habituation. Hence, it is thought that the slave does not have an immutable nature. According to the second approach, the natural slave is a subhuman with ineliminable congenital deformities. On this interpretation, the slave is in fact a defective being that resembles rather beasts than human beings. I will argue that even though these views are not mistaken entirely, neither of them provides the correct construal of Aristotle's understanding of the natural slave. I will propose instead the view that the natural slave is a fully legitimate human being who at the same time is endowed with an ineliminable rational deficiency. Finally, I will show that the rational deficiency of the slave is not very limited as some writers have claimed. I will argue that because Aristotle does not identify non-Greeks categorically or even for the most part as natural slaves, the strategy to understand the cognitive capabilities of the natural slave by examining the cultural and intellectual achievements of non-Greeks is not justified. I will show that the natural slave is not capable of acquiring advanced intelligence and skills, but he can be rational enough to survive on his own without the constant care and guidance of a master. Nevertheless, either with or without a master, the slave will never be able to share in happiness and a good life.

I will present and evaluate the first interpretation in section 1, the second in section 2 and finally in section 3 I will propose my reading together with my discussion concerning the degree of rational deficiency of the natural slave.

5.2. The natural slave as human with eliminable weaknesses

In this section, I will first briefly summarise Jill Frank's and Richard Bodéüs' views and then I will evaluate them together. Despite some different nuances in their views, both writers agree that the natural slave shares the same nature with the rest of human beings and the deficiency in their nature is not caused by their inborn nature. Rather it is caused by later actions and habituation which entails that a slave's nature is not inescapable and immutable.

In her paper *Citizens, Slaves, and Foreigners: Aristotle on Human Nature* Frank declares that "there is nothing immutable that singles out any person as a slave," instead she claims, "the slave identity…is determined by activity" (2004, 95).[8] In her view, a natural slave has a first-level capacity for *logos,* i.e., reason, as everyone else, however, what he lacks is rather a second-level capacity.[9] She states that "the one who possesses the capacity for *logos* but consistently does not use it, engaging, instead, in activity that falls short of *prohairetic* activity, is a natural slave" (96). Hence, the deficiency of the slave doesn't have to do with his innate capacity for *logos* but is "his failure to actualize the first-level capacity for *logos* he possesses" (96). So construed, the slave does not have an immutable nature. They are indeed capable of ceasing to be a slave. She argues that since Aristotle recommends slave owners offering the

[8] "We are, in Aristotle's terminology, political beings…[which] suggests that human nature is also, at least in part, constituted politically. Nature is thus not immutable but changeable" (Frank 2004, 92).

[9] According to *DA* ii 5 417a22ff. at the first level potentiality, "something is a knower in the way in which we might say that a human knows because humans belong to the class of knowers" (417a23-24). He is a potential knower at the first level "because his genus and matter are of a certain sort." (a27) At a second level potentiality—which is equivalent to first level actuality— "we say directly that the one who has grammatical knowledge knows" (a25-26). The transition from potentially knowing to coming to be an actual knower requires alteration. To be an actual knower becomes possible by "being altered through learning, with frequent changes from a contrary state" (a31-32).

promise of their freedom to slaves, it implies that a slave possesses the capacity to cease to be a slave (95). This is a reference to a passage in *Pol*. vii 10 where Aristotle maintains that in the ideal state it would be best if the farmers are slaves selected from heterogeneous tribes or among those without a spirited character. The second best would be if they are barbarians from the neighbouring regions. He further indicates that it is advantageous for the slave owners if they hold the prospect of freedom as a prize for all the slaves (1330a25-31). Frank believes that the promise of freedom recommended in this passage is revealing. "Insofar as… a slave can develop sufficiently good habits and a sufficient measure of moderation to someday deserve his freedom…and insofar as, to Aristotle, there can be no moderation without practical wisdom, indeed no virtue without practical wisdom, and vice versa (*EN* 1144b30-33), attributing to natural slaves even a "modicum of virtue" is, *eo ipso*, to attribute to them practical wisdom and, thereby, to call into question the immutability of their slavery" (94-96).

Bodéüs has advanced a similar interpretation of the natural slave in his *On the Natural Foundations of Right and Aristotelian Philosophy*. In his view, "the servile soul is not…a soul deprived of reason at birth; but it is probably not a soul that natural growth has deprived of reason either. On the contrary, the slave was born, like every infant, without reason and, like every infant, he also, according to all appearances, naturally has acquired reason with age" (89). In his analysis Bodéüs notably avoids using the term 'the natural slave' but quite often talks about 'a servile soul.' Similarly, he prefers to mention the 'weakness' of the slave's reason instead of its 'defect,' 'deformity,' or 'impairment'. With regard to Aristotle's definition that the slave is "he who participates in reason to the extent that he apprehends but does not possess it" (*Pol.* 1254b22-3), Bodéüs admits that this statement affirms the weakness of the slave's reason. Nonetheless, he maintains that "the facts that this weakness belongs to reason proves, paradoxically, that it is not, for Aristotle, a weakness of birth, nor even a natural weakness in the sense that we understand it" because "for Aristotle, reason is

a principle that is not given at birth, but that is acquired naturally with age" (89). To support this claim, he cites a passage in *Eudemian Ethics* ii 8 where Aristotle says that "reason belongs to a natural principle because it will be present in us if growth is permitted and not atrophied" (1224b29-31). He also cites as evidence Aristotle's remark at the end of *Pol*. i 13 as confirmation of the rational capacity of the slave. "Those who deny reason to slaves, and bid one use orders only, are wrong in what they say; for slaves ought to be admonished more than children" (1260b5-7). From these passages Bodéüs infers that "for the slave the reason is not absent but deprived of all that age can naturally provide. Briefly, the servile soul is characterized not by a natural defect, but by the defect of all that is not simply natural" (89).

So, Bodéüs agrees with Frank that the rational deficiency of the slave does not belong to a first-level capacity but is rather an effect of later causes. In terms of his capacity for reason the slave is not different at all from any other infant at birth. In an important and revealing statement Bodéüs writes that "if we have understood properly, on the whole he [the natural slave] is the only man in the *state of nature* in society—a man who reasons and understands what is said to him and carries out his orders well, but not more than this, i.e. *he is without this something "more" that is provided by education* and which makes one free…it is the "acquired" more than "the natural" that distinguishes individuals from each other" (90, my emphasis). So, what a servile soul lacks is not related to an inborn deficiency or incapacity but rather has to do with the lack of those things that are acquired through later education or habituation. Bodéüs further adds that if the slave lacks a deliberative capacity or the capacity for self-determination, it is because he doesn't have a goal in life and this is not a strictly intellectual capacity. Instead "it consists effectively in having the power to establish desires only in the immediate, and this betrays the weakness or powerlessness of an education that should fix desire upon a representation of a good to pursue in the future" (91).

Both Frank and Bodéüs appear to be holding the following two related claims: First, the natural slave is a human being who is endowed with the first-level capacity for *logos* at birth. Second, since the deficiency of the slave is due to (lack of) later habituation and education, the nature of the slave is not immutable.

In what follows I will argue that the line of interpretation as represented by the views of Frank and Bodéüs is not tenable for several reasons. Before we consider the reasons that contest this reading, it must be granted that their claim concerning the humanity of the natural slave is surely right. I shall concentrate extensively on the debate regarding the human-subhuman nature of the slave in the following sections and provide arguments in support of the 'humanity' of the slave. Hence, it suffices here to state that Aristotle persistently stresses that the natural slave is a human being (*Pol*. 1254a14-16; 1259b27; *EN* 1161b5-6).

However, although I agree with both writers that Aristotle treats the slave as a human being who has some share in reason, I find their further claim that the rational deficiency of the slave is not congenital but is rather due to their actions, habituation, or education mistaken.

In *Pol.* i Aristotle provides two definitions of the natural slave.[10] The preliminary definition of the natural slave occurs in *Pol*. i 4 and it reads:

> [First Account:] One who is a human being belonging by nature not to himself but to another is by nature a slave, and a person is a human being belonging to another if being a man, he is an article of property, and an article of property is an instrument for action separable from its owner. (Pol. i 4.1254a14-17)

[10] We will turn to the second definition in the next section and appeal to both definitions throughout the chapter. See Karbowski 2013 on the methodological aspects of *Pol*. 4-7 with a focus on the definitions of the natural slave.

After Aristotle gives this preliminary account, he proceeds in chapter 5 to investigate whether anyone that fits that definition actually exists or not (1254a17-8). Subsequently, he adds that "it is not difficult either to discern the answer by theory or to learn it empirically. For ruling and being ruled are not only necessary but also advantageous and in some cases, things are marked out from the moment of birth (ἐκ γενετῆς) to rule or to be ruled" (1254a21-24). Then Aristotle moves on to illustrate this claim about things that are "marked out from birth to rule and to be ruled" with various species of things among which he counts the natural slave and the master. In fact, the whole point of appealing to this argument about the natural ruler and the natural subjects that is illustrated with various things such as the body and the soul, the man and the beast, the male, and the female and so on is to reach the conclusion about the master and the slave. So, it suggests that the natural slave is fated to be a subject due to his specific nature "from the moment of birth" and whatever capacities or incapacities are ascribed to the slave, they belong to him congenitally for the most part.[11]

Next, Aristotle is very clear that the slaves can have no share in happiness and a life based on choice or *prohairetic* activity. In a notorious passage he remarks that "the state exists for the sake of a good life, and not for the sake of life only: if life only were the object, slaves and brute animals might form a state, but they cannot, for they have no share in happiness or in a life based on choice" (1280a32-34).[12] Frank, for instance, thinks that the fact that the slave falls short of *prohairetic* activity is itself a

[11] See Pellegrin 2013 who argues that the characteristics that cause an individual to deserve the status of a slave are natural and unrelated to circumstances "since the people who are natural slaves are so 'right from birth' …and not for example, as a result of imprudence (as in capture by pirates) or bad behavior (as when a person is sold because of his debts)" (102). See also Anagnostopoulos 2018, 181-182 in support of my conclusion.

[12] See also *EE* 1226b21–30 (21–22: "therefore choice is not present in all other animals, nor in a human of every age, nor in a human of every condition"); *EN* 1177a8-9: "no one thinks of a slave as having a share in happiness, unless he has also a share in life." Cf. *Pol*. 1331b39-42: "Now everyone aims at living well and happiness is clear, but some are capable of these things whereas others are not, because of some misfortune or their nature." Kraut 1997, 124 thinks that "here Aristotle has in mind slaves and women, whose reason is so defective that they cannot fully actualize the virtues."

matter of choice on the part of the slave and not a matter of his immutable nature. However, as far as this passage tells, the fact that Aristotle classifies the slave categorically with the animals in terms of their incapacity to form a state speaks against this reading. Both the non-human animals and the natural slaves by their very nature are not and will never[13] be capable of forming states because they cannot make deliberative choices and share in happiness. So, I take this passage to suggest that being a natural slave is an irreversible condition from birth.

Moreover, this interpretation seems to conflate the phenomenon of natural slavery with that of the 'slavish' human beings who need not be natural slaves. Especially Bodéüs' circumspective language to refer to natural slaves as human beings with a 'servile or weak soul' and a 'weak reason' is telling. However, there are numerous passages in and outside the *Politics* where Aristotle identifies the character or the behaviours of someone as 'servile' or 'slavish' without implying that they are natural slaves (*Pol*. 1282a1617, 1313b9, 1336b11–12; *EN* 1095b18–20, 1118b20–21, 1124b31–1125a2, 1126a78, 1128a20–22; *EE* 1215b34–1216a1, 1231b9–20; *Rhet*. 1387b15–17). Bodéüs might defend his view by pointing out that the slave "does not have a personal goal and is satisfied with serving the goals of others" (93) and that "he does not have any goals in life except to survive" (96). Again, Aristotle frequently complains that the majority of human beings fail to organize their life around any goals, drift along in life without any definite purpose and just live for the sake of mere life and survival without meaning that they are natural slaves (*EN* 1095a14-22; *Protr*. 46, 22-6). So, this interpretation seems to fail to draw a line between natural slaves and the 'slavish' human beings, who need not be natural slaves.

[13] One can object that this passage is evidence for "are not" and I add "will not" without evidence. Again, Aristotle's coupling of the slave with animals speaks against this objection. Certainly, on the basis of their necessary and eternal natural features animals will never be able to form states. If slaves are lumped here together with brute animals, which, however, will never be able to form states, neither will the natural slaves have this capability.

Finally, many readers find indeed Aristotle's recommendation to the slave owners to offer freedom as a reward puzzling. So, Frank understandably infers that the promise of freedom is indicative of the slave's capacity to acquire virtue and cease to be a slave. She thinks this implies that the deficiency of the slave is neither necessary nor ultimately ineliminable. Now, Aristotle holds that sharing the same household with a master is mutually beneficial for both the slave and the master. Even though the advantage and benefit of the slave in this relationship is in fact 'incidental' (*Pol*. 1278b32-3), it is overall more worthwhile for the slave to share the life of a free man who is capable of 'rational foresight' (*Pol*. 1252a31) and deliberation than to live by himself. Indeed, Aristotle justifies the enslavement of a natural slave with this mutual benefit and advantage. So, commentators ask, if enslavement is better and more beneficial for the slave than freedom, why does Aristotle recommend the promise of freedom as a reward? We find some discussion about this point in the *Economics*. There we read that "all [slaves] ought to have a definite end in view; for it is just and advantageous to offer slaves their freedom as a prize, for they are willing to work when a reward is set before them and a limit of time is defined" (*Oec*.1344b15-17, tr. Forster). The author of the *Economics* seems to recommend offering freedom as a reward after a certain period of time as a serious and truthful promise rather than deceit.[14] This is regarded to be the just and advantageous thing to do.[15] As I will return to this point in the last section, it suffices, for now, to say that the natural slave can indeed live and survive by themselves without the care and determination of a master. They are not like children or 'helpless mental invalids'[16] who need constant supervision. The reason why it is better for them to share a household is to benefit from the *phronêsis* of a master and acquire a certain degree of virtue which they would

[14] Cf. Schofield, 1990, 22, n.45.
[15] Aristotle has provided in his will freedom for his slaves as reported by Diogenes Laertius (v 14-15). On freed slaves and Aristotle's will see Heath 2008, pp. 267 ff.
[16] Kraut, 2002, 284.

not be able to acquire by themselves.[17] So, the promise of freedom need not incur a change of the nature of the slave as Frank thinks.[18]

To conclude, although this interpretation of natural slavery is partially right in holding that for Aristotle natural slaves are human beings who share in reason, it goes astray in taking the rational deficiency of the slave as an effect of later causes such as action, habituation, and education. Therefore, when Bodéüs says that the natural slave does not have an image of any form of good and does not desire it as his own good (90), one should take it to be a consequence of a necessary inborn deficiency related to the first-level capacity rather than as something contingent on later causes as Bodéüs and Frank think.

5.3. The natural slave as subhuman with ineliminable deformity

On the second reading that we will examine, the natural slave is a subhuman with different natural capacities whose rational defect is inescapable and ineliminable. We will consider Peter Garnsey's interpretation which aligns the natural slave with bestial animals in his influential work *Ideas of Slavery from Aristotle to Augustine*.[19] Garnsey claims that in both the *Nicomachean Ethics* and the *Politics* slaves are depicted as subhuman but in different ways (1996, 124). He argues that when Aristotle wrote the *EN*, he had not conceptualized natural slavery yet. But it doesn't follow that he didn't think of some human beings as subhuman who are aligned with beasts. Garnsey has in mind in particular *EN* vii 6 where madmen among human beings are likened to

[17] Deslauriers 2003, 216 writes that "natural subjects acquire virtue by borrowing the *phronêsis* of a natural ruler."

[18] The fact that the slave is able to acquire some kind of virtue does not suggest the possibility of undergoing a radical change to become a fully capable human being. Aristotle believes that "only so far as suffices for each for his own function" all members of the household including the slave must participate in virtues (*Pol*. 1260a15-17). That said, this also does not suggest that the offspring of the slave will also be natural slaves. Being exposed to the Greek way of life and the well-mixed environmental conditions, the children of the slaves might become capable human beings. We will see more about the theory of the effects of climate in section 5.4.

[19] See also Lear 1988, 199 and Schofield 1999, 139, who think that the natural slave is subhuman.

brute animals for the reason that both are "falling away from [their own] nature" which is human nature (1149b34-1150a1). Garnsey asks: "Are natural slaves assimilable to the category of 'bestial' people that is introduced in the *Ethics*? These people are diseased or physically underdeveloped, 'degenerate', one might say. They are said to be individuals, and rare, and though Aristotle claims that they are mainly barbarians, he does not go on to suggest that they are natural slaves" (113). However, Garnsey's response to his own question is not finished yet. He thinks that Aristotle did not have natural slaves in mind here just because he had not developed the concept of natural slavery yet. Otherwise, "Aristotle so to speak, missed an opportunity of introducing natural slaves in this context in the *Ethics*" (114). Garnsey believes that in the *EN* Aristotle already considered the humanity of the slave as inferior. He takes Aristotle's remark "there can therefore be no friendship of a master for a slave as such, though there may be for him as a man" (*EN* 1161b5-6) to suggest that 'slavery as such' is less than human condition" (110).[20]

When it comes to the *Politics*, Garnsey thinks that Aristotle wanted very much to show that the slave condition is natural and that it is advantageous and good for some people to live in this way. However, Garnsey argues, although Aristotle tried to avoid describing the natural slave with a 'degenerate' subhumanity which the bestial people of the *Ethics* manifestly exhibit, in the *Politics* "the distinctions between human and animal, and slave and animal, do not coincide. It turns out that in the *Politics* the line between human and animal is usually firmly drawn, but that between slaves and animals is fuzzy" (111). Garnsey cites as evidence a handful of passages where Aristotle makes some comparison or correlation between the slave and the animal in various discussions. For instance, Garnsey cites the passage at 1254b25-34, where Aristotle writes that "the usefulness of slaves diverges little from that of the animals; bodily service for the necessities of life is forthcoming from both" or 1252a30-31 "the best that slaves or animals can expect is security." Garnsey draws the conclusion that

[20] Cf. Broadie's commentary on *EN* 1161b6-7 in 2002, 416.

all these passages where the distinction between an animal and slave is not as firmly drawn as the one between animals and human being suggest that slavery is some kind of subhuman condition (113). "Whatever Aristotle's overall intention, the net result of his analysis is that there is very little humanity in his natural slave" (124). Presumably, Garnsey takes Aristotle's intention not to be benign. At the end of his book, he writes the following lines for Aristotle:

> Slavery was natural, beneficial, and useful to both sides of the master/slave relationship, and a necessity for the attainment of the good life. This was a sophisticated version of the popular ideology according to which slaves were as a race degenerate and vicious and therefore fit for subjection (239).

This account that treats the natural slave as subhuman and aligns it with bestial animals is far from being convincing for important reasons. First and foremost, the humanity of the slave as sharing the same species form with the other free members of the household is built into the definition of the natural slave. And Aristotle reiterates this point multiple times in *Pol*. i where we find the official and comprehensive account of natural slavery. In his first definition of the natural slave at *Pol*. 1254a12-16 that we quoted above, Aristotle depicts the slave as a human being (ἄνθρωπος) three times. Should we concur with Garnsey's implication that Aristotle might have some ulterior motive or intention while treating the slave as a human or should we take Aristotle at his own word? A discussion on whether Aristotle's account is meant to serve a certain ideology or whether false consciousness is at work when he advances his positive account of slavery is beyond the ambit of this chapter.[21] However, I see no compelling reason not to take Aristotle at his own word in his treatment of the slave

[21] Newman 1887 and Baker 1973 considered Aristotle more of a reformer than a defender of actual slavery. From more recent scholarship, see Schofield 1990 for a comprehensive and instructive discussion on those concerns. He argues that Aristotle's theory does not meet all of the requirements of an ideology. Cf. Ward 2009, 78-79 and Kamtekar 2016, *passim*. See also Pellegrin 2013, 92-93, who seems to revise his previous view that takes Aristotle's position as ideological in the Marxist sense in light of Schofield 1990.

as a human being as this idea has clearly been interwoven with every aspect of his account in central chapters on slavery. For example, in *Pol*. i 13 where Aristotle discusses the virtues of the members of the household, he starts out his inquiry by raising a puzzle regarding the status of the slave. Aristotle reasons that if the slave can have virtues such as courage and justice then the question in what respect they are different from the free men arises. But "if they have not, that is absurd (*atopon*), since they are human beings and share in reason" (1259b27-28). Then he proceeds to identify the virtues that belong to the slave as well as the woman and the child in accordance with their tasks and functions.

Garnsey's interpretation suggests that the slaves are 'contrary to nature' (*para phusin*), i.e., contrary to human nature. He associates the slave with the 'mad' and 'diseased' people who 'fall away from [their own] nature' and who, as he cites from *Physics* 199a33ff, are 'failures' or 'monsters' and thus, 'contrary to [human] nature' (*para phusin*). Now in accordance with his teleological, i.e., goal directed conception of nature, Aristotle indeed defends the view that although nature tends to achieve its goal for the most part and give rise to complete (*teleios*) specimens, it can at times err and fail to achieve its goal. In those cases where nature fails, Aristotle can think of two explanations. Either nature cannot "master the matter in the proper way" (cf. *GA* 770b9-27) or because another competing natural process impedes the course of nature (cf. *Phys*. 199b23-26). So, in those cases where nature misses the mark, it gives rise to deformed or defective specimens (see also *DA* 432b21-23).[22] However, Aristotle never depicts the slave as a defective or deformed specimen that is contrary to human nature (*para phusin*) in this sense. Even though we admit that the natural slaves can 'fall away from [human] nature' and hence, are failures of nature in the sense described in the

[22] Aristotle usually emphasizes that what happens according to nature does so 'always or for the most part' (*Phys*. 199b15-18; *PA* 663b28-9; *GA* 727b29-30) and 'always if there is no impediment' (*Phys*.199b23-6).

natural philosophical writings, Garnsey is wrong to correlate them with madmen who deviate from human nature drastically indeed.[23]

Let us look at the claim that the distinction between animals and the slave is not firm enough which thus evinces that Aristotle treats the slave on a similar footing with animals. To respond to this claim, we should appeal to Aristotle's second and more refined definition of the slave in *Pol*. i 5:

> [Second Account:] For he is by nature a slave who is capable of belonging to another (and that is why he does so belong), and who participates in reason so far as to apprehend it but not to possess it. (Pol. i 5.1254b20-22)[24]

In this definition Aristotle presents two features that delineate a slave by nature. First, he is someone who is capable of belonging to someone else and second, he can participate in *logos* to the extent he can apprehend it, but he does not possess it. As if he wants to forestall any such misunderstanding, Aristotle immediately moves on to distinguish the slave as a human being from the other animals by saying that "the animals other than man are subservient not to reason, by apprehending it, but to feelings" (1254b24). So, while the slave can respond to reason and obey reason because he can apprehend it, the animals lack this capacity and subserve their feelings. As already mentioned, in the first account of natural slavery Aristotle depicted the slave as a human being three times. And now, in the final definition of the natural slave, Aristotle leaves no room for doubt that the natural slave is different from non-human animals in their nature.

[23] Witt 1998, 129-30 seems to hold such a view by focusing on women and their form. She says that "there is something compromised about the forms of women" and "there is something wrong with their forms" She seems to hold that the form of women is defective. Cf. Henry 2007 and Gelber 2017 for contrasting views. See also Karbowski 2012, 335-341 on a discussion of alleged 'systematically' defective zoological kinds such as moles, lobster, seals, and crocodiles in Aristotle in the context of natural slavery.

[24] In the *Republic* 371d-e Plato remarkably mentions some servants as wage-earners whose thinking or intelligence (*dianoia*) does not qualify them to belong to his ideal city but whose bodies are strong enough for labor.

Owing to their developmental stage Aristotle considers children closer to animals in terms of their immature cognitive capacities and natural dispositions and traits (E.g., *HA* 588a31-b3; *EE* 1224a25-30; *EN* 1111b6-10; 1153a30-35; *Phys*. 197b5-8).[25] On the other hand, in a much-debated passage in *Pol*. i 13 children and slaves seem to resemble in terms of their cognitive capacities. In this passage the slave is said to lack the deliberative capacity whereas the child's is in an undeveloped form (1260a12-13). So, in a way both the slave and the children are incapable of exercising deliberation. However, while children grow out of this incapacity and become capable of deliberation, the slave remains permanently in this impaired condition (1260a12-14). Since there is a certain affinity between the children and animals on the one hand, and children and slaves are deficient in deliberation on the other, it might be tempting to infer a correlation between the animals and slaves. If true, that might lend some credence to Garnsey's interpretation.[26] Nevertheless, we cannot reconcile this presumption with what Aristotle says about children and slaves in *Pol*. i 13. There he complains that "those persons are mistaken who deprive the slave of reasoning and tell us to use command only; for admonition is more properly employed with slaves than with children" (1260b5-7). Admonition more properly works with slaves than with children because obviously children will not understand and respond appropriately to those admonitions. Their behaviour must rather be steered by pleasure and pain (*EN* 1172a20-1).[27] The slave can respond to those admonitions, inasmuch as he can apprehend reason but cannot deliberate independently himself.[28] Moreover, the slave can have sufficient virtue "to ensure that he does not neglect his work through intemperance and cowardice" (1260a35-6). Again, this would be beyond

[25] See Lennox 2015 for a comprehensive analysis of the commonalities and continuities between young children and non-human animals in terms of natural dispositions.

[26] See Schofield 1990, 12-16 who persistently depicts the natural slave as 'childlike' in his analysis and takes the slave to be subhuman.

[27] I borrow this reference from Heath 2008, 249.

[28] It is controversial whether slaves can have technical reasoning as well. If they are capable of technical reasoning to any degree, that widens the gap between the children and the slave even further. I will return to this point in the next section.

the capabilities of the children since pain and pleasure are the dominating factors over their behaviour. Hence, we cannot make an inference that lumps slaves with animals on the basis of an affinity between children and animals, either.

Garnsey cites many passages where Aristotle mentions or correlates animals with natural slaves (*Pol*. 1254b25-34; *Pol*. 1256b20-5; *Pol*. 1280a31-5; *Pol*. 1252a30-1; *Pol*. I254b21-24). However, as Malcom Heath puts it in those passages where animals and slaves are correlated "there is no implication that the diverse relationships which supply these illustrations are identical in any other respects than being natural and hierarchical, nor that the subordinate terms are identical in any other respect than being naturally subordinate" (2008, 259). Let us consider the passage at *Pol.* 1256b20-5, where Aristotle depicts the acquisition of natural slaves as 'hunting' or warfare. This is one of the passages on which Garnsey lays much emphasis. I think one should not make a big deal out of this depiction. Before that passage in *Pol*. vii, Aristotle has already associated human beings with animals in multiple contexts since for Aristotle human beings are in fact animals. Not only the subjects but also the rulers, the slaves as well as the masters. So, for instance, he writes that "man is a political animal" (1253a3-4); "man is a political animal to a fuller extent than a bee or any other herd animal" (1253a7-8); "men alone among animals possess speech" (1253a9). Again at *Pol*. 1256a19ff he argues that different types of food give rise to different ways of life both among humans and animals and then he proceeds to illustrate his view with animals that live scattered or in herds, nomadic people, fishermen, hunting people and so on. Considering humans as one species of animals, he moves on to discuss their ways of life. It is precisely in this context that Aristotle calls the acquisition of "such men that are by nature intended to be ruled" as a kind of 'hunting' or 'warfare' at 1256b20-6. This is already a context where animals and human beings are treated together in terms of their food acquisition and ways of life. Therefore, one should not make haste to draw the inference regarding subhumanity of natural slaves by referring to this and similar passages where slaves and animals are related in some way.

Finally, Garnsey says that "his [the master's] living tool seems to have very little that is human about it" (123). Aristotle indeed portrays the slave as a sort of 'living tool' to promote the action of the master (1254a7-8). As a 'living but separate organ' (1255b11) the slave is part of his master and this whole makes a single system where there is mutual advantage and benefit for both parties. In fact, the advantage and benefit of the slave in this relationship is 'incidental' (*Pol*. 1278b32-3) but nevertheless, "if the slave deteriorates the position of the master cannot be saved from injury" (*Pol*. 1278b31-38) and therefore, the benefit and interest will have to be mutual. Note that Aristotle distinguishes animate and inanimate tools in this debate and gives, for instance, a lookout as an example of an animate tool for a ship captain (*Pol*. i 4.1253b28-30). Again, in *EN* 1099a33-b2 Aristotle says that "many things are done by means of friends" hence seeming to have no trouble with the idea of treating friends as instruments. Also, he treats children as an inanimate property as a 'part' of the father in *EN* 1134b10. So, Aristotle can apply the term 'tool' not only to inanimate tools that serve certain functions but also to animate subordinates such as a lookout or one's children. For sure, the difference is that the slave would be at the disposal of the master perpetually. Nevertheless, again from the idea of being 'a living tool' we cannot draw the inference that the slave is subhuman or a different species.

To conclude, if the foregoing discussion is on the right track, the current interpretation makes an unjustified claim concerning the subhumanity of the slave that is not conclusively supported in the text. Natural slaves are not subhuman, and they are legitimate members of the human species. This will be more clearly defended in the next and final section of this chapter.

5.4. The natural slave as human with ineliminable deficiency

In the previous section, we have seen ample evidence that challenges the view that natural slaves are subhuman. We seem to have compelling reason to take Aristotle at his word when he clearly enunciates that natural slaves "are human and have a share

in reason" (*Pol*. 1259b27-8). His conviction is that reason is distinctive of human beings and as legitimate members of the human species, natural slaves have a share in reason.

As we have already mentioned, Aristotle also qualifies his statement about the rational capacity of the slave in his definition: "he who participates in reason to the extent that he apprehends but does not possess it" (*Pol.* 1254b22-3) is a natural slave. Some scholars have rightly pointed out that the rational capabilities of the slave identified here correspond to the non-rational part of the reason that perceives and desires and that "participates in a way in reason" (*EN* i 13.1102b14).[29] In *EN* i 13 Aristotle states that "the non-rational part…appears to be double in nature. For the plant-like aspect of soul does not share in reason in any way, while the appetitive and generally desiring part does participate in it in a way, i.e., in so far as it is capable of listening to it and obeying it" (1102b29-33).[30] Even though the natural slave is completely "without the deliberative reason" according to *Pol.* i 13 (1260a12-14), nonetheless, he can apprehend and obey reason and thus in a way participate in reason. And this is beyond the psychological capabilities and functions of animals. Moreover, according to the function argument at *EN* i 7 "the function of man is activity of soul in accordance with a rational principle or *not without a rational principle*" (1098a7-8, my emphasis). The additional part presumably is meant to include human beings with lesser rational capabilities.[31] Hence, human *ergon* does not merely consist in political deliberation or philosophical reasoning that a free adult male can perform but a broad range of rational capabilities that human beings with varying tasks and functions in the household can exhibit.[32]

[29] See also *EN* 1098a4-5; 1102a26-1103a10; *EE* 1219b28-31; *Pol.* 1333a16-18.

[30] In conclusion Aristotle states that 'an active life of the element that has a rational principle' (1098a3-4: πρακτική τις τοῦ λόγον ἔχοντος) is the human *ergon* which is our defining capacity. He adds that "of this, one part has such a principle in the sense of being obedient to one, the other in the sense of possessing one and exercising thought" (1098a4-5).

[31] See Kraut 2002, 283; Colaner 2012 and Karbowski 2013, 346, who argue that slaves are accommodated in the *ergon* of human beings at *EN* i 7.

[32] See Ward 2009 which is named "Is Human a Homonym for Aristotle?" She tackles this question by scrutinizing the deliberative capacity of human beings. Her conclusion is that for Aristotle 'human' is

My interpretation admittedly defends a quite modest understanding of the rational capacities of the slave. As I see it, the natural slaves are not deeply impaired in terms of their cognitive capacities because of which they might be in need of constant care and support. Nevertheless, they are not capable of being very intelligent and skilful in any area of reason, either. However, this reading can be objected to in two ultimately related ways which I will consider and challenge in the rest of this chapter. To dismiss the first one will be quick, but the second will take longer. One can be unwilling to grant a modest understanding of the slave's rationality on the basis of Aristotle's denial of deliberative capacity to the slave. One might argue that Aristotle merely denies the capacity to make deliberative choices and decisions about his life and well-being to the slave and thus the statement that "the slave apprehends but does not possess it [reason]" (*Pol.* 1254b22-3) should correspond to the lack of this specific capacity concerning ethical deliberation. If this is right, the opponent might claim, the slave is not impaired in 'every' area of reason such as theoretical, technical, and practical thinking but in a limited area of practical thinking.

This objection is not compelling for the following reason. Commentators often unjustifiably take the statement about the 'lack of deliberative reason' to be an explication of the statement about 'apprehending but not possessing reason'. However, Aristotle's account and analysis of the slave occurs in *Pol*. i 4-6. He gives his preliminary definition in *Pol*. i 4 and his refined, final definition which involves the specification about 'apprehension of reason' in *Pol*. i 5. On the other hand, the point about 'the lack of deliberation' is invoked in *Pol*. i 13 where Aristotle reflects about efficient household management and the functions and virtues of the members of the household. Let us have the well-known passage before us:

synonymous (97). See also Fortenbaugh 1977, 137; Deslauriers 2003, 214ff. and Karbowski 2012, 345-346 and 2019b, 232.

> There are by nature various classes of rulers and ruled. For the free rules the slave, the male the female, and the man the child in a different way.[33] And all possess the various parts of the soul but possess them in different ways; for the slave has not got the deliberative part completely (*holôs*), and the female has it, but without full authority (*akyros*),[34] while the child has it, but in an undeveloped form. Hence the ruler must possess intellectual virtue in completeness (for any work, taken absolutely, belongs to the master craftsman, and rational principle is a master-craftsman); while each of the other parties must have that share of this virtue which is appropriate to them. (*Pol*. i 13.1259b32-33, 1260a9-17)

The context in that chapter is about the ethical character of the members of the household and thus, all members including the free and the slave are assessed in terms of their deliberative capacity. After all, for Aristotle deliberating well is of utmost importance for achieving the highest human end. Since Aristotle does not mention the lack of deliberative reason in the special chapters where he shows the existence of natural slaves and progressively develops his official definition of natural slavery, and since the point about lack of deliberative reason occurs in a specific context of virtue and character, we cannot narrowly construe the statement about the apprehension of reason in terms of lack of deliberative reason in ethical matters.

Moreover, observe that Aristotle qualifies the point about the deliberative reasoning of the slave. He tells us that the slave lacks the deliberative part "completely (*holôs*)" (1260a12). If it is not a partial deficiency, then it is likely that the slave cannot advance or become skilful in technical or productive reasoning, either, because in the *Nicomachean Ethics* Aristotle defines technical reasoning as a type of deliberative

[33] See Depew 2019, 244-251 for the role divisions in the household and the significance of those role divisions for the *polis* in comparison to Plato's theory. See also Karbowski 2019b, 226-34 for further discussion of role divisions in the *polis*.

[34] In the case of women, what a 'deliberative capacity that lacks authority' amounts to is disputed. See Fortenbaugh 1977, 2015; Modrak 1994, 207-22; Dobbs 1996; Leunissen 2017, esp. ch.6; Frede 2018; Deslauriers 2022, esp. ch.3 for alternative lines of interpretation.

reasoning. According to the *Nicomachean Ethics* both production and action are about things that can be otherwise and hence we deliberate about things that depend on us (*EN* 1140a1-3). In production we are concerned about "coming into being, that is with the practice and theory of how to bring into being some of the things that are capable of being and not being (*EN* 1140a10-13)." The wise person, Aristotle tells us, is "able to deliberate well about the things that are good and advantageous to himself, not in specific contexts, e.g., what sort of things conduce to health, or to physical strength, but what sorts of things conduce to good life in general. An indication of this is that we also call those in a specific field wise if they succeed in calculating well towards some specific worthy end on matters where no exact technique applies (*ôn mê esti technê*)" (*EN* 1140a25-31). Hence, he suggests that technical reasoning is also concerned with deliberating means to a given end. Ethical type of reasoning which in the strict sense pertains only to the practically wise man is concerned with living well and is not restricted to means-ends reasoning (*EN* 1142b29-34). However, technical deliberation is restricted to finding means to ends and directed at products such as strength, health, buildings, ships and so on. Now, if the slave lacks deliberative reason "completely (*holôs*)" it is highly likely that he cannot advance either in practical or technical deliberation. Therefore, if one doesn't want to ascribe a modest degree of rational capacity in these areas of reason to the slave, they will have to provide further evidence and argument to substantiate this view.

We find such a proposal in Malcolm Heath, and this is the second objection that I will consider and discard before I conclude this chapter. I take Heath's proposal seriously because he explains the cognitive capacities of the natural slaves by appealing to the intellectual achievements of non-Greeks. Examining Heath's view, thus, gives me a chance to discuss the relationship between natural slaves and non-Greeks, a point indispensable in this context.

In a very influential paper, Heath suggests that we can understand the nature of the rational capacities of the slave by examining the rational capacities of the non-

Greeks. He takes this as a viable strategy because he believes that for Aristotle "non-Greeks are natural slaves" (2008, 245).[35] So, if we can find out about their rational capacities and limitations, it will shed light on Aristotle conception of the natural slave in general. Regarding the statement that Aristotle considers all non-Greeks as natural slaves, Heath takes it for granted at the start of his discussion without much argument. He just cites a few controversial passages (*Pol*. 1252b5-9; 1255a28-b2; 1285a19-21) without commenting on them. His elaborate analysis of the rational capacities of the non-Greeks largely rests on the ethnographic data recorded in the literature in Aristotle's day of which Aristotle was also aware. Heath notes that Aristotle himself wrote a work on non-Greek customs, but it is not extant. According to this ethnographic data of which Aristotle is evidently aware, non-Greeks are capable of autonomous rational action, could found cities, and "plan and execute logistically complex projects (such as Xerxes' invasion of Greece). Some of them had technologically advanced cultures. For instance, the Egyptians invented mathematics (*Metaph*. 1.1, 981b13-25); they and the Babylonians were good astronomers (*Cael.* 2.12, 292a7-9)" (246). On the presumption that all the non-Greeks are natural slaves, from these data, Heath infers that non-Greeks must be capable of technical and theoretical reason and their impairment must be related to practical reason (246). At the end of his thorough examination of the rational features of the 'non-Greeks', Heath makes the following conclusion about the rational impairment of the 'natural slaves':

> Natural slaves, then, suffer from an impairment that is limited in several ways: it is an impairment of the capacity for *practical* (not technical or theoretical) reasoning; it is an impairment of the capacity for *deliberation* (not a conceptual or motivational failure); it is an impairment of the capacity for *global* deliberation; and it is an impairment that disrupts deliberation by detaching an

[35] In a footnote Heath adds that "It does not follow that this is true of every individual non-Greek, without exception. For Aristotle, natural processes are relatively robust tendencies, not exceptionless rules." (2008, p.246, n.6) However, this still means that Heath thinks non-Greeks as a class are 'typically' or 'for the most part' natural slaves.

> individual's conception of intrinsic value from executive control of his behaviour. Yet, though the impairment is limited in these ways, its consequences are profound. In every other respect a natural slave may be extremely intelligent; but he lacks the capacity to make reasoned judgements about what he should do consistently with his conception of living well in general. And this renders him incapable of living a worthwhile human life. (2008, 253, his italics)

On this interpretation, the rational impairment of natural slaves is indeed quite limited. They are capable of theoretical and technical reasoning, and they might even become extremely advanced and intelligent in those areas.[36] Moreover, they are capable of practical reason to a considerable degree. They can even have a conception of some particular good, but they are incapable of guiding their deliberation with this conception.

I think this strategy to explain the rational capacity and limitations of the natural slave is not successful, either. Heath is not justified in taking non-Greeks automatically as natural slaves in his proposal. Although there are several passages in the *Politics* that might seemingly be indicative of Aristotle's identification of *all* non-Greeks as natural slaves, there is compelling evidence that tells against this presumption. It is indeed right that Aristotle thinks that a reservoir of natural slaves can be found among non-Greeks. Nevertheless, the stronger claim that Aristotle treats non-Greeks categorically or for the most part as natural slaves is quite dubious. An adequate treatment of this claim can be the subject of a separate work. I will just confine myself to discussing some key passages and offer some considerations to undermine Heath's stronger claim. My view is that not all non-Greeks or even most

[36] Recently Deslauriers 2022, 321, n.50 has expressed her agreement with Heath's reading: "Malcolm Heath has argued persuasively that we should understand the impairment of slaves as limited in important ways." This reading is appealing to Deslauriers because she believes that Aristotle takes women to be as intelligent as men despite lacking deliberative authority. If women are considered less intelligent than men, then, the difference between women and the slaves will vanish (see esp. 253-254).

of the non-Greeks are natural slaves, and so, there is no need to attribute the technical and scientific achievements of non-Greek peoples to natural slaves.

The key passage often quoted in this debate which is also cited by Heath is *Pol*. vii 7. In this notorious passage, Aristotle mentions the natural character traits of Greeks and non-Greeks that are results of environmental causes. He takes up this question because he is trying to identify what sort of 'natural qualities' the first inhabitants of his best *polis* should possess (1327b18-20). In this context, he thinks that the nations of cold regions and Europe are full of spirit but deficient in intelligence and skill whereas the nations of hot regions such as Asia are the opposite. The Asians are intelligent and skilful, nonetheless, they are deficient in a spirited temperament. Then Aristotle moves on to mention the effects of those natural character traits on the political aspects of those nations. Due to their 'natural qualities' which are effects of environmental causes, the nations of colder regions are relatively free but lack political governance whereas the nations of hot regions submit to tyranny and enslavement (1327b23-31). On the other hand, the Greeks seem to have a privilege because of their geographical intermediate position. They share in both sets of qualities and hence they are free and capable of governing themselves in the best way (1327b29-31).[37]

Aristotle is in fact committed to a theory of the effects of climate on natural character traits although he is not the first to advance such a theory.[38] This passage

[37] Aristotle adds that indeed there are differences in terms of natural traits among Greeks as well. Some of them are also one-sided in character (*Pol*. 1327b33-34). The line between non-Greeks and Greeks is also blurred by the fact that historically in both regions despotic forms of rule existed (*Pol.* 3.14, 1285a15–b3).

[38] In the Hippocratic treatise *Airs, Waters, Places* Asians and Europeans are described in the following way: "The small variations of climate to which the Asiatics are subject, extremes both of heat and cold being avoided, account for their mental flabbiness and cowardice as well. They are less warlike than Europeans and tamer of spirit, for they are not subject to those physical changes and the mental stimulation which sharpen tempers and induce recklessness and hot-headedness. Instead, they live under unvarying conditions." But this author also makes a correlative cause for natural character in the political regime: "Such things appear to me to be the cause of the feebleness of the Asiatic race, but a contributory cause lies in their customs (καὶ προσέτι διὰ τοὺς νόμους); for the greater part is under monarchical rule. When men do not govern themselves and are not their own masters they do not worry so much about warlike exercises as about not appearing warlike, for they do not run the same risks…Moreover, such men lose their high-spiritedness through unfamiliarity with war and through sloth, so that even if a man be born brave and of stout heart, his character is ruined by this form of

suggests that climatic variation features as an external efficient cause that produces differences in natural traits of peoples. We find physical explanations regarding those effects of climate on the physiology of non-human animals and humans in Aristotle's biological texts. In her recent work on natural character and the factors that have a bearing on it, Mariska Leunissen carefully and extensively analyses Aristotle's biological works. She reveals that environmental factors such as coldness, hotness, dryness, and moistness have an impact on the material nature of animals and humans. Among animals "the species-specific material nature of humans is to be the hottest, moistest, and the least earthy of all blooded animals" (2017, 45). As can be seen in the *Pol.* vii 7 passage that we mentioned above this turns out to be the well-mixed (*eu kekratai*) material nature of the Greeks who live in favourable and well-mixed climatic conditions. People from other regions deviate from the ideal material nature of humans since their blood type is *off balance* in one direction or another. That the people of cold regions are spirited and less intelligent suggests that they have hotter blood than the ideal, "well-mixed" humans. Leunissen argues that the elevated heat in material nature which gives rise to a spirited nature does not by itself explain why those people of cold regions also lack intelligence. Although excessive spiritedness might be a factor, the biological works suggest that these people also have thicker, less pure, and earthier blood and thus possess less accurate sense organs that gives rise to less intelligence.[39] On the other hand, the people of hot regions lack spirit which suggests that they have colder blood. Since they are also thinner, more watery, and purer in their material nature than well-mixed people, this enhances their perceptual intelligence. The Greeks, however, possess both intelligence and spirit and the explanation is that they live in neither hot nor cold nor extremely moist or dry

government. Good proof of this is that the most warlike men in Asia, whether Greeks or barbarian are those who are not subject races but rule themselves and labour on their own behalf." (sec.16, tr. Chadwick and Mann).

[39] While Heath 2008, 253-258 accounts for the lack of intelligence only by the elevated level of spiritedness, Leunissen 2017, 46 provides a more satisfactory account by also revealing the material nature of sense organs and intellectual traits to which the material nature gives rise to.

environmental conditions. This preserves the well-mixedness of their blood and their material nature is the most in accordance with the species-specific "ideal" for human beings (ibid., 46-47).

So, Aristotle thinks that environmental factors play a causal role in producing regional and individual differences in character by making a direct impact on human material nature. While those differences in natural character traits put some people such as the Greeks at an advantage with regard to the acquisition of virtue, it will be harder for others such as Asians and Europeans who live in less favourable climatic conditions. As we learn from another well-known passage, among the three, Asians turn out to be the most slavish people since they lack spirit and tolerate oppression. Aristotle says that "the non-Greeks are more servile in their nature (τὸ δουλικώτεροι εἶναι τὰ ἤθη φύσει) than the Greeks, and the Asians than the Europeans, they endure despotic rule without any resentment" (*Pol*. 1285a19-22). Aristotle links spiritedness with courage as it is considered to be a sort of precondition of courage. Asians who have less of this trait are thus more prone to enduring oppression.

Admittedly, all these considerations about the impact of climate on the material natures and character traits of different people of different regions suggest that Aristotle thinks that natural slaves are to be found among non-Greeks. However, it is one thing to believe that natural slaves are to be found among foreigners and not among Greeks and yet another to believe that everyone else outside the Greek region are natural slaves. Indeed, neither of the passages explicitly identifies all the Asians and Europeans categorically as natural slaves.

In our main passage in *Pol*. vii 7 among non-Greeks Aristotle only considers Asians to have a 'slavish' disposition in the sense of being continuously ruled by tyrants. He also identifies non-Greeks to be "more slavish" than the Greeks and the Asians than the Europeans in the later passage at *Pol.* 1285a19-22. However, it would be unreasonable to draw the inference from 'slavish due to their nature' to 'natural slave' presupposing that Aristotle must use the term slavish in a single sense across

the board.[40] As already mentioned before, Aristotle largely uses the term 'slavish' to refer to the behaviours and characters of certain people without implying that they are natural slaves.[41] Although it is highly likely that he thinks some of the 'slavish' people among non-Greeks are in fact natural slaves, not all slavish people can be categorically identified to be natural slaves.

Moreover, Asians are said to lack spirit, but they possess 'intelligence' (*dianoia*), and they are highly skilful in crafts, that is, they have technical reasoning and knowledge (1327b27-9). Many interpreters including Heath tend to read both types of reasoning ascribed to the Asians as referring narrowly to technical intelligence.[42] By doing so they try to associate Asian character to that of the natural slave as portrayed in *Pol*. i. However, *dianoia* is used by Aristotle to refer either to the whole of the thinking faculty (*DA* 408b3, b9, 413b13, 414b17, 415a7-8, 433a18) or an aspect of thinking that is typical of humans when Aristotle relates it to other capacities of thinking such as reason (*logos)*, reasoning (*logismos)* and intellect (*nous)* (*DA* 404a17, 414b18, 415a8, 429a23, 433a2; *Metaph.* 1025b25, *Pol.* 1370b40).[43] Remarkably, at *Pol*. 1252a31-2 *dianoia* is said to be the faculty of the 'natural ruler and the natural master.' The fact that Asians possess intelligence (*dianoia*) which is a capacity related to distinctively rational thought leaves the attempts to connect Asians to natural slaves as characterized in *Pol*. i unsupported.

Another often cited passage in this debate is from *Pol*. vii 10 concerning the recruitment of the farmers of the best *polis* that we mentioned before. Aristotle recommends that it would be best if the farmers are slaves selected from heterogeneous tribes or from those who lack a spirited character. The second best would be if they are barbarians or non-Greeks from the neighbouring regions

[40] Note that the term 'nature' is also differently used in these locutions. In the case of being 'slavish due to nature' nature refers to the way they are from birth, not just being humans.
[41] For this point see also Ward 2002, 22 and Deslauriers 2022, 254.
[42] Heath, 2008, 246, n.10.
[43] I borrow the references about *dianoia* from Ward 2002, 22-23.

(1330a25-31).[44] Here Aristotle appears to treat the slaves and the non-Greeks as two separate groups which also tells against a categorical identification of non-Greeks as natural slaves. Moreover, in *Pol* i Aristotle warned twice against assuming that a person is a natural slave: first, one should not assume that a person with the physique of a worker necessarily has a soul of a slave (*Pol.* 1255a28-b2) and second, one should not assume that a person born foreigner is necessarily a slave (*Pol.* 1254b15-34). This also undermines the interpretation that closely associates non-Greeks with slaves in this passage on the recruitment of the farmers.

Finally, any characterization of non-Greeks categorically as natural slaves would be incompatible with Aristotle's admiration of some non-Greek political organization, especially Carthaginian society. In *Pol*. ii Aristotle analyses the constitution of non-Greek, northern African Carthage as one of the best constitutions alongside Crete and Sparta.[45] As we mentioned before Aristotle clearly denies that natural slaves can form a state and are excluded from ever achieving virtue and happiness (1280a32-34). In so far as he thinks that some non-Greeks can form states, not even to mention to make one of the best constitutions, the claim that Aristotle views all or most non-Greeks as natural slaves becomes highly dubious.[46]

If the foregoing discussion is sound, we cannot plausibly hold Heath's view that all non-Greeks are natural slaves and thus attribute the technical and scientific achievements of non-Greek peoples to natural slaves. So, Heath's strategy to shed light

[44] Charles 1990, 193 argues that Aristotle makes such a suggestion about the recruitment of farmers as a reaction to Plato who in the *Republic* extended the privileges of citizenship to all in the state including farmers and craftsmen. Aristotle considers this a mistake since that would lead to quarrels, lawsuits and other social evils and the farmers will prove rebellious and unmanageable. Hence it is far better to have serfs, slaves and helots who will be less prone to revolt. That said, we should note that in *Laws* 776c/777c-d Plato also mentions that the slaves of a *polis* should not come from the same region. He is critical of Spartan helotism because of the repeated uprisings in Messenia.

[45] See Lockwood 2021, 480-485 on a detailed analysis of three constitutions in support of the view defended here.

[46] Cf. Plato's *Symposium* 209d6-e4 where Socrates praises some Greeks and barbarians that have produced good laws and constitutions that render their producers immortal: "Other men in other places everywhere, Greek or barbarian, have brought a host of beautiful deeds into the light and begotten every kind of virtue"

on natural slavery by making a detour through the ethnographic data pertaining to non-Greeks does not seem to fare better. It would indeed be inappropriate for Aristotle to define the natural slave as someone "who participates in reason so far as to apprehend it but not possess it" if he at the same time thought that the natural slave is capable of having advanced skills and becoming very intelligent in technical and theoretical reason as well as exercising practical reason to a considerable degree.

Finally, before I conclude, let me say a bit more about the technical thinking that the slave is capable of. Arguably, *pace* Heath, the natural slaves are not capable of founding cities or planning and executing logistically complex projects such as Xerxes' invasion of the Greeks.[47] The natural slave can have experience and acquire habits in any area of crafts by following the instructions and injunctions of a craftsman, but he cannot acquire craft knowledge and become a craftsman himself. In this sense he can only be 'the mere maker' or 'the hand worker' mentioned in the *Metaph*. i 1. According to *Metaph.* i.1 the 'master craftsman' (ἀρχιτέκτονας) possesses a real art and hence knows the causal explanation of the things in contrast to the 'handworker' who merely acts on the basis of experience and habit (*Metaph*. 981a30-981b4). This suggests that the handworker can heal a patient or make a pot by the injunctions of a craftsman, but he cannot have the craft knowledge as the master craftsman. Consider the three types of doctors Aristotle mentions in *Pol*. iii 1. The first is an ordinary practitioner, the second the master physician (ὁ ἀρχιτεκτονικός) and the third the educated man in the art (ὁ πεπαιδευμένος) (*Pol*. 1282a3). In light of *Metaph*. i 1 distinction, the ordinary practitioner is presumably an assistant that carries out the injunctions and the instructions of the master doctor who knows the art of healing. In this sense he corresponds to the 'hand worker' of *Metaph*. i 1 who relies on experience and habit. In the *Laws* Plato makes a similar distinction between two kinds of doctor from which

[47] In this sense I think Richard Kraut's interpretation of the rational capabilities and limitations of the slave is more on the spot (2002, 285-290).

Aristotle must have been inspired in his own distinction in *Pol*. iii 1.[48] In this passage Plato surprisingly also mentions the slave as the 'assistant' to a doctor:

> There are some who are doctors, as we call them, and others who are assistants to doctors, though we of course call them doctors too. ... Whether they {the assistants to doctors] are free men or slaves, they acquire their craft at the command of their masters and through observation and experience—but not through nature, as do free men who have made a study on their own and taught these things to their students. (Laws 720a)

According to this passage while the assistant doctors who can be free men or slaves acquire their art by observation and experience at the command of a master, the doctor who can only be a free man acquires his art by study and hence can pass their knowledge on to their students. Except for adding a third category, namely, the educated doctor, Aristotle seems to accept the other two types of doctor in *Pol*. iii 1 and it squares well with how he construes a master craftsman and a handworker in *Metaph.* i 1. Since Plato also mentions the slave among the candidates for being an assistant doctor and since Aristotle's distinction seems to acknowledge Plato's in the *Laws*, it lends further support to the view that natural slaves are capable of being 'mere makers' or 'ordinary workers' that rely on experience and habit rather than being a master craftsman who needs extensive study and reflection to acquire his art.

That said, it does not imply that the slave cannot perform simple means-end reasoning by himself. He can for sure reason about doing X to achieve Y while carrying out his daily tasks or work as a craftsman. He will for instance be able to reason that for such and such a patient, he will need to apply this medicine or for making shoes he will need to cut this material. Nevertheless, to be extremely intelligent and achieve excellence in a craft is beyond the rational powers of the slave. Similarly, to deliberate well about how he should fashion his life is something that he cannot achieve which

[48] I owe this reference to the *Laws* to Kraut 2002, 288.

is precisely the reason why it is beneficial and just for him to tie his life to that of a master. In this way, he will acquire a certain degree of virtue by borrowing the *phronêsis* of his master.

5.5. Conclusion

In this chapter, I have evaluated and contested two prominent interpretations of Aristotle's conception of natural slavery. According to the first one discussed in section 1 a natural slave shares the same human nature with the other free men. On this interpretation, like other human beings, the slave is endowed with a full rational capacity at birth, however his deficiency or 'weakness' in reasoning well results from his later actions and habituation. In this sense, Aristotle does not deny a class of human beings a good life on the basis of an immutable deficiency in their nature. Rather, it is their failure to realize their second-level capacity that leads to their subordinate status to other human beings. This implies that their servility and weaknesses may be incorrigible by now, but isn't unavoidable from the start. On the second interpretation, the natural slave is a degenerate subhuman with inborn ineliminable rational deformities. On this view, the slave shows closer affinities to bestial animals than to human beings. It is thought that the line between the slave and the animal is not drawn as firmly as the line between the animal and human beings. I have argued that both interpretations fail significantly to provide a satisfactory account that is compatible with the text. I have instead proposed that natural slaves are legitimate human beings who share the same *ergon* with the rest of humans to some extent. For Aristotle, in order to be human, to be capable of rational activity to some degree is sufficient. Although the natural slave cannot deliberate about how he should lead his life well or advance and become skilful in other areas of reasoning, he can perceive the rational injunctions of others and perform simple means-end reasoning in the course of going about his everyday tasks and duties. I have also rejected the views that take the rational impairment of the natural slave to be very

limited. I have particularly challenged such a reading that tries to explain the rational capabilities of the slave in light of the rational capacities and limitations of the non-Greeks, presuming that all non-Greeks are natural slaves. I have argued that although it might be true that Aristotle considers some of the non-Greeks to be natural slaves, it would be wrong to ascribe to him a stronger claim that renders all or even most non-Greeks natural slaves. Hence, we should be cautious not to construe and shouldn't align the rational capabilities of natural slaves with the intellectual and cultural achievements of non-Greeks. As I have shown, the view that the natural slave can use only a modest degree of rational capacities is more compatible with the text. So construed a natural slave in fact does not need someone else to take care of him so that he can survive. He can indeed take care of himself, "live on his own and earn his daily bread well enough" as Richard Kraut puts it.[49] But since the free master can deliberate well and has rational foresight, the slave will be able to benefit from the life of the master by offering him his manual labour and service.

I will conclude with some methodological remarks worth noting, although I grant that the methodology of the *Politics* is worthy of more extensive consideration and exploration. Aristotle clearly indicates that his ethics and politics form a unified philosophy of human affairs in *EN* x 9.1181b12-13. Whereas he pays much attention to the rational side of human nature in his ethical works, in the *Politics* he focuses on their political aspect. Hence, in order to settle any ethical and political question concerning human nature, it is immensely helpful to appeal to both ethical and political works and take both aspects of human nature into consideration. In the case of the phenomenon of natural slavery which is discussed heavily in *Pol.* i, we have appealed to the *ergon* argument in *EN* i 7—that we have established in chapter 3 to be an application of Aristotle's natural teleology—to settle the question regarding the humanity of the natural slave. We have seen that we need not be puzzled by whether Aristotle's attribution of inferior and deficient rational capacities to slaves is consistent

[49] Kraut 2002, 290.

with his claim about the peculiar *ergon* of human beings. Aristotle's theory of human nature is indeed consistent throughout.

Also, in the course of developing his account of natural slavery in *Pol*. i Aristotle uses a number of teleological principles to draw important political conclusions about various issues including the domestic and political position of the natural slaves. As already mentioned in section 5.2, Aristotle distinguishes between natural rulers and natural subjects in his argument to show that the natural slave (and women) are suited to their subordinate position by nature. This functional diversity appears to be an instance of a more general regulative principle of natural teleology. He maintains that natural hierarchies pervade nature and enumerates a number of items that are rulers and subjects by nature (*Pol*.1254a34-1254b16).[50] Aristotle's extensive use of teleological principles in *Pol*. i to draw political conclusions suggests that there is a teleological framework that underlies Aristotle's account of natural slavery. This in return supports the main claim of this thesis that Aristotle's practical philosophy relies on his theoretical philosophy to a considerable degree.

[50] For some of the other teleological principles in *Pol*. i and their counterparts in theoretical philosophy see *Pol*. 1252b34-1253a1; cf. *Phys*. 94a32-33, 199a30-31: Nature is an end. *Pol*. 1252a34-b5; cf. 683a20-26: Nature makes a single thing for a single task. *Pol*. 1253a9, 1256b15-22, 1263a41-b1; cf. *IA* 704b12-18: Nature does nothing in vain.

6. Concluding Remarks

In this dissertation, I have defended the claim that Aristotle's political science (including ethics more broadly) is dependent on his theoretical philosophy to a considerable degree by showing that when Aristotle constructs his arguments in his ethical and political theory, he sometimes appeals to concepts, principles, or accounts from his theoretical philosophy.

In chapter 2, I have examined *EN* vii 1.1145b2-7, the methodological passage that has widely been taken as the clearest announcement, endorsement, and application of dialectical methodology. I have argued that the received interpretation that takes this procedure to comprise three discrete stages and that identifies the appearances (*phainomena*) with reputable opinions (*endoxa*) as the starting points of the inquiry is mistaken. I have proposed a more satisfactory and improved reading of this methodological passage and its application in the subsequent discussion that agrees with the scientific methodology as outlined in the *Posterior Analytics*. I have shown that although Aristotle employs some dialectical strategies in this procedure, they only play a restricted role to facilitate the investigation and make the discovery of truth easier. By undermining a dialectical construal of this procedure in *EN* vii 1 and providing an account that arguably squares better with the rest of the ethics, I conclude that Aristotle's ethics follows a scientific method as employed in other scientific treatises that argue from facts and observations rather than opinions.

In chapter 3, I have analyzed the *ergon* argument in *EN* i 7 to show that this argument should be understood against a teleological framework of Aristotelian science. To this end, I have primarily focused on Aristotle's argument from the *ergon* of the bodily parts to the *ergon* of human beings and showed that Aristotle does not assume but also argues in a rudimentary way that human beings have an *ergon*.

Moreover, Aristotle cannot be understood to ascribe such an *ergon* to human beings in a 'loose' or 'rhetorical' way on the grounds that only artificial tools can have an *ergon* in the proper sense of the term. Indeed, Aristotle has a non-homonymous conception of *ergon* in the sense of the final cause and the essence of the thing that equally applies to tools, organic parts, and whole living beings. However, because of their specific natures, tools and organic parts have an other-regarding *ergon* while whole living beings have a self-regarding *ergon*. Whereas tools and organic parts provide for the good of a further whole when they perform their defining *ergon*, this is not the case with whole living beings. Whole living beings such as plants, non-human animals and humans are not subject to any dependence relationship to perform their function and life activities which are good and beneficial for themselves. So, human beings do in fact have an *ergon*, in the completion of which their good resides, yet, in contrast to the *erga* of the artificial tools and organic parts, it is a self-regarding *ergon*. Finally, I have argued for the claim that natural teleology which operates strictly in the case of other living beings does not determine human beings in the same way. Aristotle thinks that human beings ubiquitously and always already exhibit their constitutive *ergon*, namely rational activity, to a certain extent due to their biological nature. Nevertheless, in contrast to other living beings who achieve their *ergon* and reach completion of their form 'always or for the most part', human beings require the absence of certain internal impediments and the presence of certain enabling conditions such as culture and education. However, Aristotle is aware of this tension between his natural teleology and the peculiar human condition. He provides a solution that rests on one of his teleological principles from natural science. This, I have shown, corroborates my claim that natural teleology figures in the *ergon* argument and hence in Aristotle's practical philosophy.

In chapter 4, I have turned to the *Protrepticus*, an early text devoted to making an exhortation to doing philosophy. I have focused on Aristotle's defense of theoretical activity and knowledge against charges of uselessness by critics such as

Isocrates, an influential Athenian political thinker and rhetorician. In this protreptic text Aristotle coherently defends the view that while theoretical knowledge is intrinsically valuable and choiceworthy as an end in itself, it has some accidental utility in practical life. Aristotle thinks that in order to perform fine actions and lay down good laws the good person or politician requires theoretical knowledge of such things as the human end, the human soul, and its parts. I showed that this entails that the politician needs to engage in philosophy to some degree and get familiarity with specialized accounts and theories which would not be acquired by mere observation and experience. I further argued that Aristotle's commitment to this view is not restricted to the *Protrepticus*. He retained his conviction that the politician should possess sufficiently broad theoretical knowledge of things such as the human end, soul, and its different aspects in his later treatises such as the *Nicomachean Ethics.*

In chapter 5, I have examined the phenomenon of natural slavery as primarily argued for and discussed in *Politics* i. I have shown that two influential interpretations of natural slavery have gone astray in making sense of Aristotle's account. Aristotle by no means thinks that a natural slave is a subhuman with ineliminable rational deformities. Nor does he hold that a natural slave is a legitimate human being with eliminable incapacities that are caused by factors such as action, choice, and habituation. I have argued that the natural slave is a fully legitimate human being who nevertheless has an ineliminable rational deficiency. I have shown that the fact that some groups of human beings might be endowed with a certain degree of rational incapacity is already implicated in Aristotle's *ergon* argument in *EN* i 7. Since human *ergon* does not merely consist in political deliberation or philosophical reasoning that a free adult male can perform but a broad range of rational capabilities that human beings with varying tasks and functions can exhibit, there is no inconsistency between Aristotle's official account of human nature and his account of natural slavery. I have concluded that natural slaves are denied participation in good life on the basis of the

defective human nature they have and a teleological framework underlies Aristotle's account of natural slavery.

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