ARISTOTLE ON KNOWLEDGE AND ITS VALUE

Michael A. Coxhead

King's College London

Submitted for the degree of PhD in Philosophy

31st May 2018

This thesis is dedicated to Andrea, with all of my love.

Abstract

Part I of this thesis offers an interpretation of Aristotle's overarching epistemic project in the *Posterior Analytics*. What, exactly, are Aristotle's aims in this text? And how does he go about achieving them? I argue that Aristotle's account of what it is to know without qualification (ἐπίστασθαί ἁπλῶς) presents an epistemic ideal, with two aspects. The first is descriptive: to know without qualification is to be most knowing, i.e. to know objects that are most knowable and to know them in the most knowing way. The second is normative: without qualification knowledge is the best epistemic state, such that we have reason to strive to achieve it. On this view, Aristotle's epistemic project in the *Posterior Analytics* is an inquiry into the way we ought to know, if our knowing is to be best. I argue that Aristotle grounds the descriptive aspect of his ideal on a common idea about knowledge (that knowledge requires rational conviction) and the normative aspect on the value of knowing. Part II of this thesis provides an account of the value of Aristotle's epistemic ideal through a study of the value of theoretical wisdom (σοφία) as a virtue of thought in the *Nicomachean Ethics*. On Aristotle's view, without qualification knowledge is a constitutive part of wisdom, and thus of constitutive value with respect to wisdom. I argue that the virtue of theoretical wisdom is that which transforms the proper activities and objects of theoretical wisdom into something good for the knower. Theoretical wisdom is therefore valuable in virtue of its transformative nature. Aristotle thus argues that we have reason to strive for his epistemic ideal because it is a constitutive part of theoretical wisdom, and theoretical wisdom transforms the objects and activities of wisdom such that they are good for us to know and engage in. I further argue that Aristotle's virtue-theoretic explanation of epistemic value offers a lesson for contemporary virtue epistemologies: because of its transformative nature, virtue is not the source of its own value. In order to explain the value of knowing with reference to virtue, epistemologists must explain virtue's value in relation to other goods.

Contents

Acknowledgements

My deepest thanks to my supervisors, Raphael Woolf and MM McCabe. This thesis started life under MM's guidance and it has drawn to a close with Raphael's. MM provided me with, amongst other things, the confidence and inspiration to ask and pursue whatever questions came to me. With Raphael, I developed the strength and self-assurance to answer those questions and, slowly but surely, put this thesis together. Their insight and guidance have shaped my thought in innumerable ways. Perhaps most importantly, our conversations have been a constant source of pleasure. I hope that they will not draw to a close.

I also wish to thank Liba Taub, who supervised me as I turned away from chemical engineering to the history and philosophy of science, at the tail end of my undergraduate degree. Liba first taught me to read a text closely and carefully. She also provided enormous support and encouragement, with which I was propelled into graduate research. Suffice to say, I would not have written a PhD thesis (let alone one on Aristotle!) without her.

Whilst at King's, I also had the good opportunity to work briefly under both Bill Brewer and Clayton Littlejohn, as I explored the intersection of ancient Greek epistemology and the contemporary Anglophone analytic literature. My thanks to both of them for their time and support. I also benefited from conversations with Joachim Aufderheide and Shaul Tor throughout my graduate studies. My thanks, as well, to the graduate community at King's, for whom I've not left enough time to name names. Safe to say, I could not have asked for more engaging and kind philosophers to work alongside.

Thanks to Andrea Fassolas, Gary Hayes, Jack Gordon-Brown, John Wright, and Peter Ridley: both for reading sections of this thesis and, more importantly, for their love and friendship. I could not do without it.

I've had the good fortune to organise a series of philosophy courses at HMP Belmarsh during my doctoral studies. This opportunity gave my philosophical endeavours new meaning and, in so doing, did wonders for my mental health. Thanks, in particular, to Andrea Fassolas and Andy West, with whom I developed

and deliver the programme, and to Bill Brewer, George Pugh, MM McCabe, and Raphael Woolf for their work supporting this project. My thanks, as well, to our students; we were certainly not the only teachers in the room.

Enormous thanks are also due to my family for their continued love, encouragement, and support: Ann and Andy Coxhead, Lucy Hitchcock, Ravi Amaratunga Hitchcock, and Sue and Lazo Fassolas.

Finally, to my partner, Andrea Fassolas, whom I could not thank enough. I met Andrea halfway through my PhD, whilst on a long period of interruption. If it were not for my finding love with her, I would not have written this. Andrea's unwavering support, insight, enthusiasm, and brilliance is such that no future looks brighter than one with her. And this brightness sustains me.

List of abbreviations

APo   *Analytica Posteriora* [*Posterior Analytics*]

APr   *Analytica Priora* [*Prior Analytics*]

Cat   *Categoriae* [*Categories*]

DA   *De Anima* [*On the Soul*]

DC   *De Caelo* [*On the Heavens*]

DI   *De Interpretatione* [*On Interpretation*]

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 Corruption*]

HA   *Historia Animalium* [*History of Animals*]

IA   *De Incessu Animalium* [*Progression of Animals*]

Insomn   *De Insomniis* [*On Dreams*]

Long   *De Longitudine et Brevitate Vitae* [*On Length and Shortness of Life*]

MA   *De Motu Animalium* [*Movement of Animals*]

Mem   *De Memoria et Reminiscentia* [*On Memory*]

Met   *Metaphysica* [*Metaphysics*]

Meteor   *Meteorologica* [*Meteorology*]

MM   *Magna Moralia* [*Great Ethics*]

PA   *De Partibus Animalium* [*Parts of Animals*]

Phys   *Physica* [*Physics*]

Poet   *Ars Poetica* [*Poetics*]

Pol   *Politica* [*Politics*]

Prot   *Protrepticus*

Rhet   *Ars Rhetorica* [*Rhetoric*]

SE   *Sophistici Elenchi* [*Sophistic Refutations*]

Sens   *De Sensu et Sensibilibus* [*Sense and Sensibilia*]

Top   *Topica* [*Topics*]

A note on pronouns

Translations maintain Aristotle's gendering throughout. Aristotle speaks, for example, of the man who knows without qualification (ὁ ἐπιστάμενος ἁπλῶς, *APo*: 1.2: 72b3-4), the excellent man (ὁ σπουδαῖος, *EN* 3.4: 1113a29), and the wise man (ὁ σοφός, *EN* 6.7: 1141a1, *Met* 1.2: 982a19). My translation of ἄνθρωπος ("human") remains gender neutral, though I expect that when Aristotle spoke of humans he often had men at the forefront of his mind (and, for that matter, free, Greek, male citizens). Not wishing to follow Aristotle's gendering, I write with gender neutral pronouns outside of translations, using third personal pronouns ("they", for both singular and plural) or impersonal pronouns ("one", "we"). It is worth noting, however, that this decision risks obscuring the thoroughgoing misogyny that Aristotle's texts often embody.

INTRODUCTION

In spite of its title, this thesis is concerned with three themes. First, the aims of epistemology: what do we take ourselves to be doing when we do epistemology? And why do we do it? Second, the value of knowledge: what, if anything, is valuable about knowing? Third, the relationship between value and virtue: how, if at all, might the value of knowledge be explained with recourse to concepts of epistemic virtue? I explore these questions through a study of Aristotle's account of what it means to know without qualification (ἐπίστασθαί ἁπλῶς) in the *Posterior Analytics* and his account of theoretical wisdom (σοφία) as a virtue of thought in the *Nicomachean Ethics*.

The aims of epistemology

Aristotle introduces the subject matter of the *Posterior Analytics* with the claim that 'we think that we know each thing without qualification [ἐπίστασθαί ἁπλῶς], and not in the sophistic way according to accident, whenever both we think that we know, in respect of the cause through which the thing is, that it is the cause of this [thing], and that it does not admit of being otherwise' (*APo* 1.2: 71b9-12). This passage poses a number of interconnected interpretative questions. Surely knowledge is not limited to necessary truths known by means of their causes, so why does Aristotle put such demanding conditions on knowing? Perhaps, then, Aristotle is not here concerned with describing mere knowledge but something epistemically more demanding, such as understanding, expert knowledge, or even scientific knowledge (the risk of anachronism notwithstanding). But, if that's right, the *Posterior Analytics* may have little to say about our everyday epistemic practices. Why, then, does Aristotle frame his account in terms of what we think when we take ourselves to know? Is Aristotle not here drawing on demotic intuitions about knowledge? If not, on what basis does Aristotle derive the content of his account?

These questions should leave us wondering about the nature of Aristotle's epistemic project in the *Posterior Analytics*. What, exactly, are Aristotle's aims in this

text? And how does he go about achieving them? Part I of this thesis argues for a common but under interrogated interpretation of the *Posterior Analytics*. On this view, to know without qualification is an epistemic ideal, with two aspects. The first is descriptive: to know without qualification is to be most knowing, i.e. to know objects that are most knowable and to know them in the most knowing way. The second is normative: without qualification knowledge is the best epistemic state, such that we have reason to strive to achieve it. In the *Posterior Analytics*, then, Aristotle is not merely concerned with giving an accurate description of one or other epistemic state as it is ordinarily conceived, e.g. as one might set out to give a conceptual analysis of propositional knowledge, understanding, or scientific knowledge. Rather, Aristotle is first and foremost concerned with accounting for an epistemic state that is of superlative epistemic value, i.e. the best way of knowing that one could achieve.[1] Aristotle's epistemic project in the *Posterior Analytics* is thus an inquiry into the way we ought to know, if our knowing is to be best. In this sense, the *Posterior Analytics* puts value first.

Interpreting the *Posterior Analytics* in this way presents two puzzles. The first concerns the relationship between Aristotle's epistemic ideal and ordinary conceptions about knowledge: how, if at all, is Aristotle's epistemic ideal connected with everyday epistemic discourse and practices? I argue that Aristotle grounds his epistemic ideal on a common idea about knowledge: that knowledge characteristically requires rational conviction. In so doing, I offer an account of Aristotle's epistemic project in the *Posterior Analytics* as continuous with our interests as run-of-the-mill knowers. The second puzzle concerns the value of Aristotle's epistemic ideal. What, if anything, is good about achieving it? What reason do we have to strive for it? Answering this question is the task of Part II.

---

[1] Of course, it might turn out that this superlative epistemic state is best described as something such as understanding, expert knowledge, or scientific knowledge, but Aristotle's primary purpose is not simply to subject one or other of these epistemic states to analysis.

The value of knowledge

Because of Aristotle's aspirational aims in the *Posterior Analytics*, there is a sense in which this thesis is not concerned with the value of knowledge, at least as knowledge is typically understood in the contemporary Anglophone epistemology literature. Taking inspiration from Plato's *Meno*, contemporary debate about the value of knowledge has typically been concerned with the value of propositional knowledge. In particular, why (and whether) knowledge that *p* is more valuable than mere true belief that *p*. Given that Aristotle's epistemic ideal will turn out to be much more demanding than mere propositional knowledge, it cannot be the case that Aristotle is concerned with the value of mere propositional knowledge. Nonetheless, Aristotle is wholeheartedly concerned with the value of knowing, broadly construed. What marks the difference between contemporary accounts of the value of knowledge and Aristotle's, is that the former are concerned with the lower bounds of knowing (i.e. the distinction between knowledge and mere true belief) whereas Aristotle looks towards the highest peak of our endeavours as knowers: what would it mean to be most knowing and what is its value? Aristotle's account of the value of knowledge is therefore an account of the value of this epistemic apex.

Part II of this thesis provides an interpretation of the value of without qualification knowledge understood as a virtuous epistemic state. This requires a change of focus. Aristotle's account of intellectual virtue occurs not in the *Posterior Analytics* but in the *Nicomachean Ethics*. There, Aristotle treats demonstrative knowledge (ἐπιστήμη) and non-demonstrative knowledge of the first principles of demonstrations (νοῦς) as constitutive parts of the intellectual virtue of theoretical wisdom (σοφία) (*EN* 6.7: 1141a17-20, b2-3). I therefore provide an account of the value of theoretical wisdom as a virtuous state of the soul, where ἐπιστήμη and νοῦς are of constitutive value with respect to theoretical wisdom. On this view, the value of Aristotle's epistemic ideal is to be explained in light of the fact that without qualification knowledge is a constitutive part of theoretical intellectual virtue. In this sense, this thesis argues that Aristotle's project in the *Posterior Analytics* cannot

be fully explicated without recourse to Aristotle's account of theoretical intellectual virtue in the *Nicomachean Ethics*. Without this, it's not possible to explain the value and thus the normative aspect of Aristotle's epistemic ideal in the *Posterior Analytics*, according to which we have reason to know without qualification because such knowledge is valuable. On my account, without qualification knowledge is valuable because it is a constitutive part of theoretical intellectual virtue.

As a consequence of focusing on ἐπιστήμη and σοφία, I restrict Aristotle's account of the value of knowledge to an account of the value of *theoretical* knowledge, as opposed to knowledge that is practical or productive (here employing Aristotle's own distinctions). This marks a further difference between Aristotle's account of the value of knowledge (as I present it) and contemporary debates about the value of knowledge, which are often concerned with the relative value of mere propositional knowledge and mere belief in relation to truth, and truth in relation to the good of achieving our practical goals and ambitions. On Aristotle's view, theoretical knowledge has no bearing on the practicable human good. Aristotle must therefore offer an explanation of the value of his epistemic ideal that does not hinge, for example, on the relationship between knowing and successfully achieving our practical or productive ends. I expect that there are interesting stories to be told about Aristotle's views on the nature and value of practical and productive knowledge, but I do not consider them here.

Virtue and the explanation of the value of knowledge

I argue that Aristotle accounts for the value of theoretical wisdom with the thought that theoretical wisdom is a virtuous state of the soul. On this view, in order to have the virtue of theoretical wisdom one must not only be epistemically wise (i.e. have the knowledge and understanding that is constitutive of wisdom) but also be a lover of wisdom. The theoretically wise person's love of wisdom is such that they ascribe final value to the activities and proper objects of theoretical wisdom. I argue that Aristotle thus accounts for the value of theoretical wisdom in two ways. First, in virtue of their love of wisdom, the theoretically wise person chooses theoretical

contemplation for its own sake and takes maximal pleasure in the activity of contemplation. As a consequence, theoretical wisdom transforms mere contemplative activity into an activity of complete or perfect happiness, such that contemplative activity is maximally good for the wise person in virtue of their wisdom. Second, in virtue of being theoretically wise, the theoretically wise person knows the goodness of the proper objects of theoretical wisdom and so evaluates them as such. Similarly, then, theoretical wisdom transforms the objects of knowledge into something good for the knower. On this view, Aristotle considers the proper activities and objects of theoretical wisdom to be of value. The virtue of theoretical wisdom is that which transforms the proper activities and objects of theoretical wisdom into something good for the knower. Theoretical wisdom is therefore valuable in virtue of its transformative nature.

It should be noted from the outset that I do not defend Aristotle's claim that there are valuable activities and objects of theoretical wisdom (either *tout court* or as Aristotle describes them). For example, I do not consider the question of whether theoretically wise contemplation is in fact an activity of complete or perfect happiness. Similarly, I do not consider the question of whether there are objects of theoretical wisdom that are in fact of value. My concern, instead, is to explicate the particular sense in which Aristotle employs virtue to explain the value of knowing. For Aristotle, the virtue of theoretical wisdom is not itself a source of value. Instead, theoretical wisdom is valuable because it transforms the proper activities and objects of theoretical wisdom into something good for the theoretically wise person. The activities and objects of theoretical wisdom are thus the source of theoretical wisdom's value.

In the conclusion of this thesis, I reflect on a number of contemporary virtue-theoretic accounts of the nature and value of knowledge, according to which knowledge is distinctively valuable because it is a credit-worthy manifestation of epistemic virtue. On this view, epistemically virtuous activity is valuable in itself because virtue is of value. Aristotle is often invoked as a source of these views. I argue that these contemporary virtue epistemologies are left wanting because they do not explain the source of virtue's value. One lesson that we might take from

Aristotle's virtue-theoretic approach to epistemic value, then, is that virtue alone is insufficient to explain the value of knowing: virtue is merely that which transforms the good objects and activities of knowledge into something good and valuable for the knower. A full account of epistemic value must explain the source of virtue's value, perhaps with recourse to the value of the proper objects and activities of knowing.

A note on method

The value of knowledge is not a canonical topic of Aristotelian scholarship. However, in order to pursue my questions, it has been necessary to consider a host of canonical and often controversial issues, such as Aristotle's views on necessity, causality, definition, demonstration, virtue, action, agency, contemplation, pleasure, and the divine. I have often not dwelt long on the controversies these topics throw up. If I had, I may never have answered the questions I set out to answer. I have attempted either to be transparent about the assumptions that my interpretation hinges on, or to make clear when I consider the outcome of such controversies to be orthogonal to my interpretation.

Thesis summary

This thesis proceeds in two parts. **Part I** provides an interpretation of Aristotle's overarching epistemic project in the *Posterior Analytics*, according to which Aristotle is concerned with giving an account of an epistemic ideal. It proceeds in three chapters.

In **Chapter 1**, I argue for and interrogate the thought that Aristotle's account of without qualification knowledge presents an epistemic ideal. I pay particular attention to Aristotle's invocation of what we think when we think that we know without qualification. I argue that Aristotle's epistemic ideal should not be interpreted as a mere description of a superlative epistemic state, according to which Aristotle sets out to give an accurate description of the truth conditions

according to which we are most knowing. The problem with this view is that Aristotle appears to wildly misdescribe what "we" think when we think that we know (ideally or otherwise). I instead argue that Aristotle's epistemic ideal also has prescriptive aspects: we ought not take ourselves to know ideally unless we know necessary truths by means of their causes, and we ought to strive for causal knowledge of necessities. The benefit of this normative interpretation is that it is not beholden to giving an accurate description of what "we" think when we think that we know. But it raises two further questions. First, what relation does Aristotle's epistemic ideal bear to what "we" think about knowledge? Second, what reason do we have to strive for it?

Chapter 2 answers the first of these questions. I argue that Aristotle bases the content of his epistemic ideal on a common idea about knowledge found in both philosophic and forensic literature: that when we know, we are rationally convinced of what we take to be true. On this view, knowledge characteristically requires rational conviction, such that some form of rational conviction distinguishes knowledge from lesser epistemic states, e.g. true opinion. I argue that Aristotle has the resources to argue that, since knowledge characteristically involves rational conviction, the superlative epistemic condition (i.e. to be most knowing) will involve maximal rational conviction. And, on Aristotle's view, we achieve maximal rational conviction when we know necessary truths by means of their causal explanations and know them as such. Aristotle thus has grounds to argue that we ought not take ourselves to know ideally unless we have causal knowledge of necessities. Accordingly, Aristotle's account of the epistemic ideal is not divorced from ordinary ideas about knowledge. Rather, it is informed by the thought that, in trying to know, we seek rational conviction in what we take to be true.

Chapter 3 sets the stage for answering the second question from Chapter 1: what reason do we have to strive for Aristotle's epistemic ideal? I argue for two points. First, that a substantial thesis about the value of knowledge lurks behind Aristotle's description of the sophistic way of knowing, according to which the sole value of any and all knowledge is instrumental upon the value of making money through the appearance of wisdom. This presents a direct challenge to Aristotle's

epistemic ideal: given that causal knowledge of necessities is typically unnecessary for the end of making money through the appearance of wisdom, we might have no reason to strive to know without qualification. Aristotle must therefore present an alternative account of the value of knowledge, one that gives us reason to strive for his epistemic ideal. Second, Aristotle takes issue with a sophistic definition of knowledge, according to which to know is to have knowledge. This definition is ambiguous between a number of senses of "having". I argue that, on Aristotle's view, knowledge without qualification is had in a very particular way, i.e. as a demonstrative state of the soul. This forms the basis of Aristotle's account of the value of knowing without qualification, according to which knowledge is not only a state of the soul but a *virtuous* state of the soul.

Part II provides an interpretation of the value of without qualification knowledge understood as a constitutive part of the intellectual virtue of theoretical wisdom (σοφία) in the *Nicomachean Ethics*. On this view, Aristotle's epistemic ideal is of value because it is a constitutive part of theoretical wisdom, which is in turn the best state of the knowledgeable (ἐπιστημονικόν) part of the soul. The challenge, then, is to explain the sense in which theoretical wisdom is of value: what's good, exactly, about having theoretical intellectual virtue?

Part II proceeds in four chapters. **Chapter 4** argues that Aristotle's account of theoretical wisdom as an intellectual virtue in *Nicomachean Ethics* 6 faces a version of Plato's value problem for knowledge, as presented in the *Meno*. Plato's value problem is concerned with whether knowledge is more valuable than lesser but nonetheless factive epistemic states, e.g. true opinion. If truth is the sole bearer of epistemic value, then why should we strive for knowledge over and above *true* opinion? I argue that the same worry applies to Aristotle's account of theoretical wisdom. Aristotle appears to commit to the view that truth is the sole bearer of epistemic value in respect of theoretical thought: the doing-well and goal of the knowledgeable part of the soul is truth and truth alone. Given this, why should we strive for theoretical wisdom over and above lesser (i.e. non-virtuous) epistemic states that have a true grasp of the very same truths as theoretical wisdom? Aristotle's answer is that theoretical wisdom is that in virtue of which we grasp

theoretical truth *most of all* or *well*. But what would it mean to grasp theoretical truth well? And how might this explain the value of theoretical wisdom over non-virtuous epistemic states that have a *mere* grasp of the same theoretical truths? I explore four insufficient answers and conclude with a proposal: in order to grasp theoretical truth well, it is necessary to fulfill analogues of all three of Aristotle's agential conditions for virtuous action (*Nicomachean Ethics* 2.4). On this view, in order to grasp theoretical truth well it is not only necessary to do so with knowledge and understanding, but also with virtuous motivations.

Chapter 5 is dedicated to motivating this interpretation on textual grounds. I argue for two theses. First that, on Aristotle's view, theoretical wisdom is acquired by a process of learning by doing: we become theoretically wise only if we engage in the characteristic activities of theoretical wisdom. Such theoretical intellectual activities include but may not be limited to theoretical contemplation and grasping theoretical truth. This process of acquisition is directly analogous to the acquisition of character virtues, e.g. we become just only if we perform just actions. I argue for this first thesis in order to motivate the second. To account for the fact that we acquire character virtues by performing virtuous actions, Aristotle distinguishes between mere virtuous action and virtuous action performed virtuously with reference to three agential conditions: the epistemic, the motivational, and the stability conditions. The second thesis, then, is that Aristotle similarly distinguishes between the mere performance of theoretical intellectual activities and those activities performed wisely (i.e. well) with reference to analogues of the same three agential conditions. In order to grasp theoretical truth well, it is necessary to (i) grasp truth with knowledge (the epistemic condition), (ii) choose to grasp truth and choose it for its own sake (the motivational condition), and (iii) grasp truth from a firm and stable state of knowledge (the stability condition). I further suggest that the theoretically wise person's virtuous motivations are but one part of their love of wisdom, in virtue of which the theoretically wise person attributes final value to the characteristic activities and proper objects of theoretical wisdom.

The final two chapters provide examples of how the theoretically wise person's virtuous motivations and love of wisdom account for the value of

theoretical wisdom. **Chapter 6** explores the motivational condition in relation to Aristotle's account of virtuous contemplation as an activity of complete or perfect happiness. In order for one's contemplative activity to be an activity of complete or perfect happiness, it's necessary to contemplate with virtuous motivations, such that (i) one chooses to contemplate and chooses to contemplate for its own sake and (ii) takes maximal pleasure in one's contemplative activity. These are both necessary for grasping truth and contemplating *well*. I argue that the virtue of theoretical wisdom thus has value, because it transforms mere contemplative activity into something superlatively good and pleasant for the theoretically wise person.

Chapter 7 considers Aristotle's claim that theoretical wisdom is the best epistemic state because it is concerned with the best objects. I argue that Aristotle subscribes to the view that value is imparted on a body of knowledge by its proper objects. Because theoretical wisdom is concerned with the best knowable objects, theoretical wisdom is the best epistemic state. In order to explicate this principle, I argue that Aristotle conceives of theoretical wisdom as an evaluative epistemic state: in order to be theoretically wise, it is necessary that the wise person correctly judges the proper objects of theoretical wisdom to be genuine instances of goodness, and so evaluates them as such. Otherwise put, to fail to evaluate the objects of theoretical wisdom as good is an epistemic failure, such that if someone knows a proper object of theoretical wisdom, x, but fails to evaluate x as good, then they should not be said to be theoretically wise in respect of x – there is more for them to know about x, i.e. its goodness. So, in order to grasp theoretical truth well (i.e. wisely) it is necessary to know the goodness of the proper objects of theoretical wisdom. In this sense, the theoretically wise person is a lover of wisdom because its proper objects are valuable to know for the person who is wise in respect of them. I thus argue that theoretical wisdom has value because it transforms the proper objects of theoretical wisdom into something good for the theoretically wise person.

The **Conclusion** considers the relationship between the value of theoretical wisdom as a virtue in the *Nicomachean Ethics* and Aristotle's epistemic ideal in the *Posterior Analytics*. I also reflect on a number of contemporary virtue-theoretic

accounts of the nature and value of knowledge, in relation to my interpretation of Aristotle.

PART I. Aristotle's epistemic project in the *Posterior Analytics*

1. Ἐπίστασθαί ἁπλῶς in the *Posterior Analytics* as an epistemic ideal

1.1. Introduction

In the following canonical passage from the *Posterior Analytics*, Aristotle offers his first explicit account of what it is to know without qualification (ἐπίστασθαί ἁπλῶς):

T1.1   And we think that we know each thing without qualification, but not in the sophistic way according to accident, whenever both we think that we know, in respect of the cause through which the thing is, that it is the cause of this [thing], and that it does not admit of being otherwise. It is clear, then, that knowing is something of this sort; and in fact [concerning both] those who do not know and those who do know, they [both] think they are in such a state, but those who do know actually are, such that, of what there is knowledge without qualification, it is not possible for it to be otherwise. (*APo* 1.2: 71b9-16)[2]

Ἐπίστασθαι δὲ οἰόμεθ' ἕκαστον ἁπλῶς, ἀλλὰ μὴ τὸν σοφιστικὸν τρόπον τὸν κατὰ συμβεβηκός, ὅταν τήν τ' αἰτίαν οἰώμεθα γινώσκειν δι' ἣν τὸ πρᾶγμά ἐστιν, ὅτι ἐκείνου αἰτία ἐστί, καὶ μὴ ἐνδέχεσθαι τοῦτ' ἄλλως ἔχειν. δῆλον τοίνυν ὅτι τοιοῦτόν τι τὸ ἐπίστασθαί ἐστι· καὶ γὰρ οἱ μὴ ἐπιστάμενοι καὶ οἱ ἐπιστάμενοι οἱ μὲν οἴονται αὐτοὶ οὕτως ἔχειν, οἱ δ' ἐπιστάμενοι καὶ ἔχουσιν, ὥστε οὗ ἁπλῶς ἔστιν ἐπιστήμη, τοῦτ' ἀδύνατον ἄλλως ἔχειν.

Why should we be convinced of Aristotle's claims? It is often noted that Aristotle appears to place unnecessarily demanding conditions on knowledge: that the proper objects of knowledge are necessary, that we must know that they are necessary,[3] and that we must know why they are the case.[4] Surely we can know

---

[2] Translations from the *Posterior Analytics* follow Barnes 1994, to greater and lesser degrees.

[3] Μὴ ἐνδέχεσθαι τοῦτ' ἄλλως ἔχειν may be governed by either οἰώμεθα or γινώσκειν, and my translation of T1.1 is as ambiguous as Aristotle's Greek. Either: (i) when we think that we know each thing without qualification, we think that it does not admit of being otherwise; or: (ii) when we think that we know each thing without qualification, we think *that we know* that it does not admit of being otherwise. Nonetheless, *Posterior*

contingent facts, and surely we can know mere facts without also knowing their explanations. Why, then, does Aristotle restrict knowledge thus?

This concern should have us questioning what we take Aristotle to be doing when he does epistemology in the *Posterior Analytics*. For example, the thought that T1.1 is too demanding might presuppose that Aristotle is offering an account of the necessary and sufficient truth conditions for mere (propositional) knowledge. Such accounts typically describe the threshold requirements that distinguish knowledge from lesser epistemic states (e.g. mere true belief). In this sense, they describe the *minimum* conditions sufficient for knowing. Such accounts also often use ordinary language knowledge ascriptions as data. If we read T1.1 as part of the same philosophical project, then we should worry that T1.1 fails because it places criteria on knowledge that are far stricter than the sufficient conditions under which it is true to say that someone knows (in English) or has ἐπιστήμη (in Classical Greek).[5]

But does this line of interpretation get Aristotle's epistemic project in the *Posterior Analytics* right? In this chapter, I argue that it does not. In accordance with a common interpretation of Aristotle's epistemic project in the *Posterior Analytics*, I argue that T1.1 introduces an epistemic ideal. Minimally understood, epistemic ideals describe superlative epistemic states: the *most* knowing state we can achieve with respect to a particular object of knowledge (and, in Aristotle's case, the most knowing state with respect to the most knowable objects). However, epistemic ideals also have evaluative and normative undertones: they imply that the *most* knowing state is also the *best* epistemic state, and that we *ought* to strive to achieve it. In one sense this framework is helpful: in order to judge whether Aristotle's claims about knowledge in T1.1 are convincing, we must first get a handle on what Aristotle is trying to convince his reader of. And the thought that T1.1 describes an epistemic ideal avoids the difficulty that Aristotle sets the bar for knowledge

---

Analytics 1.6 (75a14-15) makes clear that when we know demonstratively, we know both the explanation *and* that what we know is necessary. Cf. Barnes 1994: 90.

[4] See Taylor 1990: 121, Barnes 1994: 91.

[5] On Greek usage, see §1.4.1.

unduly high.[6] But it also leads to further questions: Why should we think that the superlative epistemic state requires having causal knowledge of what cannot be otherwise? In what sense is achieving this superlative epistemic state good? And why ought we strive for it?

In §1.3, I raise an interpretative puzzle for T1.1. In §§1.4-5, I detail and critique common solutions to this puzzle. In response to this critique, I outline my own interpretation of Aristotle's epistemic project in §1.5. A central aspect of my interpretation is that Aristotle's epistemic project is normative: in conceiving of knowing without qualification as the best epistemic state, Aristotle implies that we ought to strive for it. In §1.6, I offer an overview of three recent accounts of different normative aspects in Aristotle's epistemology, clarifying my interpretation in relation to each of them.

1.2. A note on translating ἐπιστήμη

There has been considerable literature on how best to translate ἐπιστήμη and its cognates, particularly in the *Posterior Analytics*. Myles Burnyeat argues that ἐπιστήμη should be translated as "understanding", this being the English word best suited to highlight the relationship between Aristotelian ἐπιστήμη and grasping causal explanations (Burnyeat 1981, 2011).[7] James Lesher, on the other hand, argues that "expert knowledge" or "disciplinary mastery" are more appropriate catchalls: someone who is ἐπιστημῶν does not merely understand, they are a master of their discipline (Lesher 2001). And David Bronstein, to take one final example, translates ἐπιστήμη as "scientific knowledge" in order to emphasise his thought that ἐπιστήμη is a species of knowledge (γνῶσις), one that is 'characteristic of an expert scientist' (Bronstein 2016: 18).

Nonetheless, I translate ἐπιστήμη as knowledge. This is in spite of the fact that most interpreters agree that Aristotelian ἐπιστήμη is something more demanding than the English word "knowledge" requires – both in its ordinary

---

[6] It also has independent textual support. See §1.5.1.

[7] See also: Kosman 1973, Barnes 1994: 82, Tierney 2001.

language uses and in the Anglophone analytic philosophy literature (e.g. as mere propositional knowledge that *p*).[8] What's more, my translation obscures the fact that Aristotle makes use of other knowing-verbs when talking about ἐπιστήμη (predominantly γινώσκειν and εἰδέναι). But it also has distinct advantages. According to my interpretation of the *Posterior Analytics*, T1.1 introduces Aristotle's epistemic ideal: ἐπίστασθαί ἁπλῶς is a superlative epistemic state. One consequence of this goal-oriented epistemology is that Aristotle's account of ἐπιστήμη ἁπλῶς does in fact turn out to be more demanding than mere propositional knowledge. Indeed, it might well be best described as understanding, expert knowledge, or scientific knowledge. Nonetheless, in so far as T1.1 describes an epistemic ideal, we should hope that this ideal bears relation to and is continuous with lesser epistemic states and our everyday practices as knowers (broadly construed). Indeed, in Chapter 2, I argue that Aristotle derives his epistemic ideal from a common presumption about knowledge: that knowing characteristically involves rational conviction. As such, I translate ἐπίστασθαί as "to know" to capture the sense in which T1.1 describes a superlative epistemic state that is both continuous with and the apex of lesser ways of knowing (e.g. mere knowledge of a fact to be explained). By "knowledge" I only mean to suppose that ἐπιστήμη is a factive state of the soul: it is up to Aristotle to then describe and argue for the type of factive state that ἐπιστήμη is.[9] What's more, that ἐπιστήμη ἁπλῶς is considerably more demanding than mere propositional knowledge is captured by the fact that T1.1 doesn't merely describe what it is to know, but what is required to know *without qualification*.[10] To know without qualification is the superlative way of knowing certain objects of knowledge, which can be known in a variety of inferior ways, e.g. in the sophistic way according to accident (T1.1) or merely knowing the fact (τὸ ὅτι ἐπίστασθαι, *APo* 1.13: 78a22).

---

[8] Cf. Irwin 1977: 211-213, Fine 2010a: 136-140.

[9] *EN* 6.3: 1139b14-17.

[10] As a consequence, I contend that my translation of T1.1 is not circular: *without qualification knowledge* is described in terms of *knowledge*. At worst my translation presupposes a sense of what it means to know. On the complaint of circularity see, e.g., Burnyeat 1981: 103, Barnes 1994: 90, Angioni 2016: 80.

1.3. An interpretative puzzle for T1.1

A particularly curious aspect of T1.1 is Aristotle's invocation of what we think when we think that we know. Commentators often have relatively little to say about this aspect of T1.1. In many cases, T1.1 is transformed from the first-person plural to the third-person singular and reduced, without much fuss, to a definition along the lines of:

> *S* knows *x* without qualification (if and?) only if (i) *S* knows the cause of *x* and (ii) *S* knows that *x* cannot be otherwise.[11]

An implicit assumption of these interpretations is that Aristotle just happens to frame his account of knowledge in terms of what we think when we think that we know; it is something philosophically unimportant to how Aristotle thinks about knowledge, either a rhetorical flourish or a peculiar turn of phrase. But we might wonder whether the way that Aristotle frames T1.1 is as insignificant as these interpretations imply. In fact, when Aristotle talks about knowledge he often speaks in terms of what we think knowledge is, and what we think when we think that we know. T1.1 is but one example of this.[12] What's more, T1.1 is Aristotle's first use of the first-person plural in the *Posterior Analytics*. In *Posterior Analytics* 1.1, Aristotle speaks either declaratively (71a1-2), uses impersonal constructions (71a11), or speaks in the third-person singular or plural (71a17-18). Why, then, when Aristotle first introduces his account of knowledge without qualification, does he speak in terms of what we think about knowledge? Why not just declare what knowledge is?

Perhaps Aristotle's invocation of what "we think" is intended to draw upon our intuitions about knowledge. Intuitions are frequently used in epistemology, typically in order to judge whether someone knows in a particular case (e.g. the

---

[11] E.g. Burnyeat 1981: 106, Fine 2010b, Angioni 2016.

[12] For others, see: *APo* 1.9: 76a28-30, 1.20: 85b28, 1.33: 89a6-10, 2.11: 94a20, *Phys* 1.1: 184a12-14, 2.3: 194b18-20, *Met* 1.1: 981a30-b6, 1.3: 983a24-26, *EN* 6.3: 1139b19-21.

fake-barn case). Judgements about particular cases are then used to test individual theories of knowledge. For instance, if we judge that the person in the fake-barn case doesn't know, but that they meet the criteria sufficient for knowledge of a certain epistemic theory (e.g. virtue reliabilism), then this stands as evidence for the falsity of that theory.[13] Alternatively, we might use intuitions to derive the details of our theory of knowledge. Consider, for instance, the claim that, "Virtue isn't teachable, but Socrates knows that virtue is teachable". This sentence sounds intuitively false, from which we might infer that knowledge requires truth.[14] Perhaps, then, Aristotle is drawing upon our epistemic intuitions as evidence for his theory of knowledge: we *think* that knowing without qualification requires knowing necessities and their causes, so knowing without qualification requires knowing necessities and their causes.

Along these lines, Jonathan Barnes suggests that Aristotle's invocation of what we think when we think that we know is a premise, in an argument from consensus (Barnes 1994: 91):

(P1)   When we think that we know something without qualification, we think that we know its cause and we think that (we know that?)[15] it cannot be otherwise.

(C)   Therefore: When we know something without qualification, we know its cause and (we know that?) it cannot be otherwise.

P1 proposes that we are in general agreement about what we think is true when we think that we know. From this, Aristotle infers what is in fact true when we know (C). This does indeed seem to be the thrust of the passage. 71b9-12 presents Aristotle's opening premise: when we think that we know each thing without qualification, (i) we think that we know its cause and (ii) we think that (we know that?) it cannot be otherwise. Aristotle thus resolves that, 'It is clear, then [τοίνυν],

[13] See Goldman 1976. Cf. *Theaetetus* 201a-c, Nagel 2007: 792.

[14] See Stanley 2008.

[15] See n. 3.

that knowing is something of this sort' (71b12-13). This is further explained (γὰρ, 71b13-15): everyone who thinks that they know – both those who know and those who mistakenly think that they know – they all think that what they know cannot be otherwise. Consequently (ὥστε, 71b15-16) knowledge without qualification is of what cannot be otherwise. Twice, then, Aristotle describes what we think when we think that we know, and from this infers something that is in fact true of knowledge. Similarly, there are numerous instances in the undisputed *Corpus* in which Aristotle invokes what we think as evidence for what is in fact the case.[16]

But is P1 true? The puzzle for this interpretation is whether Aristotle offers a convincing description of what "we" think when we think that we know. If Aristotle misdescribes what we think, then P1 should be rejected as false. This turns on who "we" is meant to be. Commentators typically go one of two ways, either supposing that "we" is broad in scope, referring to what most or all ancient Greeks thought when they took themselves to know; or taking "we" as narrow in scope, referring to the opinions of Aristotle's philosophical predecessors. In the next section, I consider both options in turn, arguing that neither interpretation is plausible.

1.4. What do "we" think when we think that we know?

1.4.1.   The opinions of the many

Let's first consider whether "we" is broad in scope. Myles Burnyeat supposes that T1.1 sets the stage for Aristotle's inquiry into knowledge 'from a base in ordinary thought', describing how ἐπιστήμη was 'ordinarily […] conceived' (Burnyeat 1981:

---

[16] *APo* 1.9: 76a28, 1.20: 85b28, 2.11: 94a20, *Phys* 1.1: 184a12, 2.3: 194b18, 34, *PA* 1.1: 639a7, *MA* 1: 698a14, 4: 699b22, *Met* 1.1: 981a25, 1.3: 983a26, 1.9: 990b11, 2.2: 994b29, 3.2: 996b20, 5.2: 1013a35, 7.2: 1028a36, *EN* 1.7: 1097b16, 1.10: 1101a1, 4.9: 1128b16, 20, 6.5: 1140b8, 6.7: 1141a13, 6.11: 1143b8, 10.5: 1175a23, 10.7: 1177a22, *Pol* 2.4: 1262b7, *Rhet* 1.4: 1360b28, 2.2: 1378b12, *Prot* F53: 2. Cf. *Phys* 1.4: 187b12, *Met* 1.1: 981a26, 1.2: 982a8, 13.7: 1082b8, 17, *EN*: 6.3: 1139b20, *EE* 7.1: 1234b32.

105-106). In addition to T1.1, Burnyeat cites *Nicomachean Ethics* 6.3 and *Posterior Analytics* 1.33 in support of his interpretation (*ibid.* 108-109 n.23):

T1.2   And so what knowledge is [will] henceforth be clear, if it is necessary to speak precisely and not be guided by likenesses. For we all suppose that what we know does not admit of being otherwise; […] Hence what is knowable is from necessity. (*EN* 6.3: 1139b18-23)[17]

        ἐπιστήμη μὲν οὖν τί ἐστιν, ἐντεῦθεν φανερόν, εἰ δεῖ ἀκριβολογεῖσθαι καὶ μὴ ἀκολουθεῖν ταῖς ὁμοιότησιν. πάντες γὰρ ὑπολαμβάνομεν, ὃ ἐπιστάμεθα, μηδ' ἐνδέχεσθαι ἄλλως ἔχειν· […] ἐξ ἀνάγκης ἄρα ἐστὶ τὸ ἐπιστητόν.

T1.3   And this agrees with how things appear to be. For opinion is unstable, and so too is the nature of the items we are talking about. In addition, no one thinks that they opine something when they think that it is impossible for it to be otherwise – rather, they think that they know it […] (*APo* 1.33: 89a4-9)

        καὶ ὁμολογούμενον δ' οὕτω τοῖς φαινομένοις· ἥ τε γὰρ δόξα ἀβέβαιον, καὶ ἡ φύσις ἡ τοιαύτη. πρὸς δὲ τούτοις οὐδεὶς οἴεται δοξάζειν, ὅταν οἴηται ἀδύνατον ἄλλως ἔχειν, ἀλλ' ἐπίστασθαι·

In T1.2, Aristotle is perhaps more explicit than in T1.1: we *all* suppose that what we know cannot be otherwise. In a similar fashion to T1.1, Aristotle takes this statement of consensus as indicative of the fact that what is knowable cannot be otherwise. And, as T1.3 claims, *no one* thinks that they opine when they think that it is impossible for the object of their cognition to be otherwise; rather, they think that they know. This is, as Aristotle declares, how things appear to be. Burnyeat's line of interpretation thus supposes that T1.1 aims to capture what most or all Greeks thought about ἐπιστήμη, from the philosopher in the Academy to the citizen in the Agora. It expresses an ordinary conception of ἐπιστήμη, one that was commonly shared.

---

[17] Translations from the *Nicomachean Ethics* follow Reeve 2014, to greater and lesser degrees.

But there are two issues with this view. First, despite the fact that T1.2 and T1.3 appear to be more explicit about the scope of Aristotle's "we", they nonetheless remain ambiguous. "We all" may still be shorthand for "all of us", where "us" is a limited set of people. Similarly, "no one" need not mean "nobody at all" but "not one of us". So the text of T1.2 and T1.3 is suggestive of Burnyeat's claims, but not conclusive. Second, T1.1 seems to bear little to no relation to ordinary conceptions of ἐπιστήμη in classical Greece.[18] A brief survey of the various literary uses of ἐπιστήμη and ἐπίστασθαί in Liddell and Scott's lexicon testifies to this (Liddell *et al* 1996). Ἐπίστασθαί and its cognates could be used to refer to a wide variety of knowledges, including knowing how to do something, knowing people, and knowing facts or states of affairs.[19] Although ἐπιστήμη could take causes or explanations as its object,[20] it is clear that an ancient Greek could very easily think that they have ἐπιστήμη of something without knowing its cause. The same is true for Aristotle's thought that knowledge is of necessities: I have yet to find a single example suggesting that ἐπιστήμη is of things that cannot be otherwise, at least outside of philosophical literature. Whilst ἐπιστήμη certainly could be used to refer to more demanding epistemic conditions (e.g. military *expertise*)[21] it's clear that ἐπιστήμη certainly did not demand causal knowledge of necessities, paradigmatically or otherwise. So, if Aristotle did intend for T1.1 to capture ἐπιστήμη as it was ordinarily conceived – what all or most classical Greeks thought when they thought that they had ἐπιστήμη – then Aristotle must have been deeply out of touch with ordinary (or perhaps literary) folk. It would thus be uncharitable to read P1 as reporting what all or most ancient Greeks thought when they thought that they had ἐπιστήμη.[22]

---

[18] Barnes 1994: 91.

[19] E.g. Sophocles *Philoctetes*: 1055-1059, *Oedipus the King*: 1110-1116, and *The Women of Trachis*: 335-338, respectively.

[20] E.g. Aeschylus *Persians*: 599.

[21] E.g. Thucydides *The Peloponnesian War*: 1.121.4, 6.72.4, 7.62.2.

[22] Buryeat's view is perhaps more complex. On the one hand, Burnyeat claims that T1.1 describes ἐπιστήμη as it is 'ordinarily […] conceived' (Burnyeat 1981: 105). On the other, Burnyeat later claims that the *Posterior Analytics* is 'concentrated on the τέλος, the

1.4.2.   The opinions of the wise

An alternative line of interpretation supposes that Aristotle's "we" is narrow in scope, referring to Aristotle's philosophical predecessors or a subset of them. For instance, Monte Ransome Johnson explains Aristotle's "we think" in T1.1, first, as the reporting of philosophical reputable opinions and, second, as a hesitation (Johnson 2005: 94). When Aristotle says that we think that knowledge requires knowing the cause, he is invoking the consensus of his philosophical predecessors. Aristotle agrees with them (knowledge *is* of causes) but is cautious and argues that knowledge in fact requires knowing by means of all four causes (*APo* 2.11, cf. *Phys* 2.3). Thus when Aristotle describes those who do not know but think they know in T1.1, he has in mind his philosophical predecessors who thought that they knew because they thought they had achieved causal knowledge. But, in fact, they fell short of knowledge because they failed to distinguish between and know by means of all four causes.[23]

But we should also be wary of this reading. Whilst it's true that many of Aristotle's philosophical predecessors were concerned with identifying causes and first principles, few made grasping causes an explicit requirement for knowledge. Plato is perhaps the only explicit proponent of this view (e.g. *Meno*: 98a3-4, *Republic*

---

achieved state of understanding which is the end and completion of the epistemological process' (*ibid.* 133). As far as I'm aware, Burnyeat does not resolve these claims. Is it the case, for instance, that T1.1 doesn't aim to describe ἐπιστήμη as it was ordinarily ascribed to people, but rather an ordinary conception of the τέλος of ἐπιστήμη? My presentation of Burnyeat might then be misrepresentative: T1.1 is rather intended as a description of a common understanding of the complete and final epistemic achievement. The truth of P1 thus depends on whether it accurately describes how this final epistemic achievement was indeed conceived. I argue below that, even on this interpretation, P1 is likely false (§1.5.1).

[23] This straightforwardly misinterprets the text of T1.1. Aristotle's claims about those who do not know but think they know stand in support of the claim that without qualification knowledge is of what cannot be otherwise. What those people think, then, is not that they have grasped the cause, but that what they know cannot be otherwise. Presumably their mistake is that what they *think* cannot be otherwise is *in fact* contingent.

6: 508e3-4). And whilst it seems right to say that T1.1 must have Plato in mind, it would be peculiar for Aristotle to use "we" only to refer to himself and Plato. Indeed, Aristotle did not shy away from identifying Plato as the owner of a particular view, both in agreement and disagreement, and both on his own and grouped together with other philosophers (e.g. the Pythagoreans).[24] And we should have similar concerns about Aristotle's claim that knowledge is of what cannot be otherwise. It could perhaps be argued that the Forms as the proper objects of knowledge are necessary in so far as they are unchanging (e.g. *Republic* 5: 479a). Similarly, we might be able to argue that Parmenides subscribed to the view that knowledge is of what cannot be otherwise, in so far as he claims that knowledge is of "what-is" and that it's not possible for "what-is" not to be (B2). But even if these interpretations are correct in outline, T1.1 could not be read as reporting what all or most of Aristotle's predecessors thought about knowledge. There just wasn't such philosophical consensus.[25] We are left, then, with the possibility that T1.1 reports what just a few of Aristotle's predecessors might have agreed to about knowledge. But we should also resist this thought. First, it leaves us wondering why Aristotle doesn't identify the particular philosophers that he has in mind. And, similarly, why Aristotle doesn't offer the kind of critical reflection that is so often a hallmark of his engagement with his predecessors' views.[26] Second, if "we" just reports what *some* philosophers thought about knowledge, then P1 will hardly support a general claim about what is in fact true when we know (at least, not without further argument). Consequently, we should not read P1 as reporting the opinions of Aristotle's philosophical predecessors, either all or a subset of them.

We are thus returned back to the puzzle of how to read T1.1. P1 apparently offers a description of what "we" think when we think that we know. From this, Aristotle draws a conclusion about the requirements for knowledge. But, as we have seen, if "we" is read as referring to all or most people, then P1 is

---

[24] E.g. *Top* 4.2: 122b25-26, *Phys* 3.4: 203a4-16, *DC* 1.10: 280a30-32, *Met* 1.6: 987a29-988a17, 4.5: 1010b11-14, 6.2: 1026b14-15, *EN* 1.4: 1095a32-b1, 2.3: 1104b11-13, 10.2: 1172b28-29.

[25] *Pace* Vlastos 1985: 15-18. Cf. Fine 2010b: 325.

[26] E.g. *Phys* 1.2-6, *DA* 1.2-5, *Met* 1.3-9.

straightforwardly false. The same can be said if "we" is intended to refer to all or most of Aristotle's predecessors. For P1 to even stand a chance of being true, we must read "we" as referring to a narrow subset of Aristotle's predecessors (or, perhaps, to "we" Aristotelians). The problem with this, however, is that P1 no longer offers good grounds for Aristotle's conclusion: why should we be persuaded of Aristotle's account of what it is to know without qualification, based on the fact that *some* people don't take themselves to know until they have causal knowledge of necessities? That said, both Burnyeat's and Johnson's interpretations have something to recommend them. The most straightforward reading of T1.1 is that it invokes what we (all) think when we think that we know, and Aristotle's account of knowledge also clearly draws upon some of the views of his philosophical predecessors. The challenge, then, is to determine in what sense, as Burnyeat puts it, T1.1 has its 'base in ordinary thought', and how it simultaneously relates to the opinions of Aristotle's predecessors, as Johnson suggests. I'll return to this issue in §1.6 and Chapter 2. In the next section, I consider a strategy employed by a number of commentators to address this interpretative difficulty, according to which T1.1 describes an epistemic ideal.

1.5. Ideal knowledge

A common interpretation of Aristotle's epistemic project in the *Posterior Analytics* maintains that T1.1 describes an epistemic ideal. Whilst I agree with this interpretative approach in outline, I offer a critique of its details. This critique will in turn provide motivation for inquiring into the value of without qualification knowledge.

1.5.1. Knowledge without qualification as a superlative epistemic state

In an attempt to save Aristotle the embarrassment of having given an account of knowledge that is far too strict, C.C.W. Taylor suggests that:

[…] *nous* + *epistēmē* is the ideal type of knowledge, knowledge strictly or properly speaking, to which other kinds of knowledge can be seen as approximating (Taylor 1990: 121-122)

According to this view, T1.1 is Aristotle's description of true or perfect knowledge. Accordingly, P1 doesn't report what Greeks typically or ordinarily thought when they thought that they had ἐπιστήμη, but what they thought when they thought that they had an *ideal* form of ἐπιστήμη.[27] Let's first consider what's correct about this interpretation, before turning to its difficulties.

It seems clear that the *Posterior Analytics* is concerned with describing a way of knowing that is in some sense superlative. Something along these lines can be taken from Aristotle's use of ἁπλῶς in T1.1. Broadly speaking, Aristotle uses both the adjectival and adverbial forms of ἁπλῶς synonymously with terms such as unmixed (ἀμιγής) and undivided (ἀδιαίρετος), and opposes it with that which is composite (σύνθετος), intertwined (συμπεπλεγμένον), and twofold or repeated (διπλῶς).[28] Consequently, common translations of ἁπλός are "single" or "simple", and "singly" or "simply" for ἁπλῶς (*simpliciter* in Latin). When applied to speech, ἁπλῶς has the sense of something being said without anything else needing to be added; hence the common translation, "without qualification". Aristotle offers an example in the *Topics*: sacrificing one's father isn't fine without qualification but only to certain people. In such cases we must properly qualify the claim that "to sacrifice one's father is fine". In other cases, however, no qualification is necessary. For example, one need not qualify the claim that "to honour the gods is fine" because honouring the gods is fine without qualification (*Top* 2.11: 115b29-35). More generally Aristotle tells us that if a predication can be made in a certain respect (κατά τι) or with respect to a certain time (πότε) or place (πού) then it can also be made without qualification (1159b11-14). In T1.1 we might similarly read ἁπλῶς as indicating that Aristotle is not talking about knowledge in some qualified sense – what it means to know for certain people or in a particular way (e.g. in the sophistic

---

[27] See also Barnes 1994: 91, Gifford 2000: 172-173, Lesher 2001: 54, Burnyeat 1981: 133.

[28] For references, see Bonitz 1870: 76-77.

way). Instead, T1.1 describes knowledge *properly speaking*. And ἁπλῶς indicates that T1.1 describes what is true of knowing where no qualifications hold.

This is somewhat fleshed out by Aristotle's use of ἁπλῶς in his contrast in *Posterior Analytics* 1.2 between what is better known and prior to us (ἡμῖν) and what is better known and prior by nature (τῇ φύσει) (71b33-72a5). There he uses ἁπλῶς synonymously with "by nature": universals are better known and prior both by nature and without qualification, whereas particulars, which are closer to perception, are better known and prior to us. Given the close proximity of this passage, we might wonder whether we are being prompted to think back to T1.1. Indeed, Aristotle elsewhere makes clear that the goal of learning is to make that which is better known by nature better known to us. For example, that which is known by perception is better known, more familiar, and more convincing to the novice learner, but that which is universal is better known, more familiar, and more convincing to the expert knower.[29] Similarly, the expert knower knows better and is more convinced of the first principles of demonstrations, whereas the novice learner knows better and is more convinced of that which is to be demonstrated (*APo* 1.2: 72a25-b4).[30] On this view, that which is better known, prior, and more convincing by nature is that which is causally prior by nature: if *p* is the cause of *q* then *p* is prior and better known by nature than *q*, and if *p* has no further cause then it is best known and most prior.[31] And the goal of learning is to orientate oneself such that one's knowledge tracks the causal-explanatory priority that belongs by nature. In this sense, we can think of without qualification knowledge at the end of an arc of learning: starting from what is better known to us we come to know (better) what is better known without qualification. To know without qualification is to have mastered a body of knowledge, such that one has an epistemic grasp that properly fits the nature of the object of knowledge.

---

[29] For the inclusion of conviction, see *APr* 2.16: 64b32-3, *APo* 1.2: 72a25-b4, 1.25: 86b27.

[30] See also *Top* 6.4: 141b3-142a15, *Met* 1.2: 982b2-4, 7.3: 1029b3-8. Cf. *Phy* 1.1: 184a, *DA* 2.2: 413a11-16. Cf. Lesher 2012.

[31] Cf. *Cat* 12: 14b10-13. See also Schiaparelli 2011, Goldin 2013: 206-213, Bronstein 2016: 127-129.

That the *Posterior Analytics* is concerned with explicating a particularly demanding epistemic state is further confirmed by the conditions that Aristotle places on without qualification knowledge, both in T1.1 and elsewhere. For instance, we might merely know the fact that the planets twinkle. But in order to know this without qualification, Aristotle thinks that we must know it by means of a demonstration that explains why the planets twinkle and also know that, because they are near, it cannot be otherwise that they twinkle. This, in Aristotle's terms, involves a search for the middle term: not satisfied with knowing the fact, we inquire into its explanation (*APo* 2.2: 89b36-90a1, 90a25-26, 31-34, cf. 1.13). Similarly, Aristotle claims both that a demonstration is better if we know more in virtue of it, and that we know something most (μάλιστα) when we know it by means of its ultimate explanation. From this, he infers that universal demonstrations are better than particular ones (*APo* 1.24: 85a21-22, 85b32-38, cf. *APo* 1.9: 76a18-22). As such, we should be inclined to think that T1.1 isn't intended to describe some mere state of knowledge, but a superlative epistemic state: one in virtue of which we are said to be most knowing.

On this view, Aristotle is concerned with accounting for a very particular epistemic state in the *Posterior Analytics*: not *mere* knowledge (ἐπιστήμη) but knowledge *without qualification* (ἐπιστήμη ἁπλῶς).[32] And this, in turn, is to be most knowing, which at least requires (i) knowing all of the relevant facts and explanations that belong to a particular body of knowledge (e.g. all of the subject-kinds, their essences, and demonstrable attributes) and (ii) knowing them in a way that is most knowing (e.g. having made that which is prior and better known by nature better known to us; knowing the necessary, explanatory connections between the essences of subject-kinds and their demonstrable attributes, and

---

[32] The expression ἐπίστασθαί ἁπλῶς and its cognate forms occur only ten (or eleven) times in the surviving *Corpus,* all of which are found in Book 1 of the *Posterior Analytics.* In addition to its double occurrence in T1.1, see *APo* 1.1: 71a26, 28, 1.2: 72b3, 1.3: 72b14, 1.4: 73a21, b6, 1.5: 74a33, 1.8: 75b25, 1.22: 84a6 (this being the uncertain case). For εἰδέναι ἁπλῶς, see *APo* 1.1: 71b3, 1.3: 72b30, 1.5: 74a33. For discussion, see Gifford 2000: 171-178.

knowing them as such).[33] In this sense, Taylor is correct to suppose that Aristotle's concern in the *Posterior Analytics* is an 'ideal type of knowledge, knowledge strictly or properly speaking' (Taylor 1990: 121-122).

The difficulty that Taylor's interpretation faces, however, is that P1 nonetheless turns out to be false, and thus Aristotle's argument in T1.1 doesn't get off the ground. To see this, consider Taylor's claim that other types of knowledge should be understood to approximate to Aristotle's epistemic ideal. This claim can be read in at least one of two ways: first, that other kinds of knowledge are approximate (i.e. rough, inexact) versions of the ideal type of knowledge that T1.1 describes. Or, second, that when we set out to know, we approximate to (i.e. approach, try to come close to) the ideal type of knowledge that T1.1 describes.

The first reading quickly runs into trouble. It's difficult to think of a meaningful sense in which many lesser cases of ἐπιστήμη could be said to approximate to Aristotle's ideal. Take, for instance, cases in which someone is said to have ἐπιστήμη when they know a person or know how to use a bow and arrow. It's hard to imagine in what sense Aristotle could claim that what these people think when they think that they know, approximates to thinking that they have causal knowledge of what cannot be otherwise. Consequently, we may still reject P1 on the grounds that it fails to describe an epistemic ideal that lesser types of knowledge in fact approximate to.

The second reading claims instead that when we set out to know, we try to come close to the ideal type of knowledge that T1.1 describes. In this sense, Aristotle's epistemology could be described as aspirational, in so far as it describes

---

[33] See Kosman 1973: 380-392, Lesher 1973, Charles 2000: 270-2, Bronstein 2016. As I understand T1.1, ἐπίστασθαί ἁπλῶς includes both demonstrative knowledge and non-demonstrative knowledge, i.e. νοῦς (*pace* Gifford 2000: 174-175 n.11). This is suggested immediately after T1.1: 'And so, whether there is also another way of knowing, we shall say later, but [now] we declare that [we] also know through demonstrations' (Εἰ μὲν οὖν καὶ ἕτερος ἔστι τοῦ ἐπίστασθαι τρόπος, ὕστερον ἐροῦμεν, φαμὲν δὲ καὶ δι' ἀποδείξεως εἰδέναι. *APo* 1.2: 71b16-17.) In T1.1, then, Aristotle describes what it is to know without qualification. He then details one way of knowing without qualification (i.e. through demonstrations) and promises to consider whether there is another way of knowing without qualification (i.e. non-demonstratively) (see *APo* 1.3: 71b18-22, 2.19).

an epistemic end that we strive for. It is certainly the case that many instances of knowledge fail to be, or even approximate to, causal knowledge of what cannot be otherwise. But this need not be a problem. Aristotle's claim is that we aim towards causal knowledge of necessities, such that when we go about knowing we aspire to this end. This is consistent with the thought that many instances of knowing that we have along the way, do not measure up the same strict standards. But we should still worry that T1.1 misdescribes what we do in fact strive for in our epistemic practices. It would certainly be implausible to suppose that many (if any) Greeks self-consciously strove for the ideal that Aristotle describes. The same may be true for Aristotle's philosophical predecessors: given there was little philosophical consensus about what knowledge is, we shouldn't expect a straightforward description of what his predecessors thought the epistemic ideal is. We may thus reject P1 on the grounds that "we" don't, in fact, think that the epistemic ideal is causal knowledge of necessities.

1.5.2. *Knowledge without qualification as a prescriptive epistemic ideal*

One way around these difficulties is to claim that T1.1 doesn't describe the epistemic ideal, but prescribes it. This interpretation is taken up by Robert Pasnau under the banner of idealized epistemology. Pasnau claims that T1.1 is Aristotle's account of 'the ideal epistemic position for a human being, given the powers we have available to us and the kind of world we live in' (Pasunau 2013: 988). Like Taylor, Pasnau's understanding of Aristotle's epistemological project has an evaluative aspect: there are 'lesser' forms of knowledge that still count as knowledge, but are in some sense 'deficient' when compared with Aristotle's epistemic ideal (*ibid.* 944). But Pasnau also adds a normative, prescriptive dimension: the epistemic ideal is not only best; it is also something that we ought to aim for (*ibid.* 989).[34] Pasnau suggests that this reading has the benefit of not being so

---

[34] Here I distinguish between evaluative and normative claims. As I use the two terms, evaluations judge something to be good or bad, better or worse. Norms, on the other hand, involve prescriptions: they demand that something ought to be done. For

beholden to how knowledge is ordinarily conceived (*ibid.* 990-991). It can no longer be claimed that Aristotle misdescribes what "we" think when we think that we know, because P1 does not attempt to describe what we in fact think when we think that we know. Nor can it be complained that Aristotle misdescribes what his contemporary Greeks (philosophers or not) in fact strove for in their epistemic practices, or how they in fact conceived of the epistemic ideal. This is because T1.1 aims to prescribe the epistemic ideal that we ought to strive for. If it turns out that Aristotle's account of the epistemic ideal doesn't match up with how his contemporaries understood it, then Aristotle can claim that his contemporaries were mistaken. In this sense, Aristotle's account is revisionist.

There are, however, two immediate difficulties with reading T1.1 in this way. First, if Aristotle is prescribing an ideal that we ought to strive for, then why does he apparently describe what we think when we think that we know, instead of straightforwardly claiming that we ought to strive for causal knowledge of necessities? Aristotle is not shy of using deontic modal verbs.[35] It would be strange for him not to do so in T1.1. Consequently, a proponent of Pasnau's interpretation must square the proposal that Aristotle is introducing a prescriptive, epistemic ideal with the text of T1.1. The second difficulty is that, as Pasnau understands them, epistemic ideals are normative in so far as they put demands on people (or, at least, on people *qua* knowers). Ideals imply that you ought to strive to achieve them and, in this sense, they are meant to be both action guiding and reason giving. If we are to understand T1.1 as prescribing an epistemic ideal, then, we must have some account of its reason-giving force and the grounds of its normativity. This is essential if we are to be convinced that the epistemic ideal is as Aristotle describes

---

instance, a piece of poetry might be judged to be bad in so far as it fails to exhibit traits characteristic of good poetry, e.g. it may be too literal or lack eloquence. Such evaluations are at least conceptually distinct from the further claim that it ought to have been better. After all, it might be the case that no one cares whether or not a certain piece of poetry is good. However, this case appears markedly different from a moral evaluation, where the judgement that an act is morally bad is more readily associated with the thought that it ought not be done. In such cases, evaluations may imply prescriptions.

[35] E.g. *APo* 1.5: 74a4. Cf. *Met*. 1.3: 983a24-26.

it. Without this, Aristotle's epistemic ideal risks being consigned to the status of mere stipulation.[36]

To see the force of this second challenge it's worth considering Philippa Foot's account of the norms of etiquette. As a code of behaviour, etiquette makes certain normative demands, e.g. that you ought not put your elbows on the dinner table. But, Foot claims, the fact that etiquette makes such demands doesn't give us reason to act in accordance with them. Indeed, we only have reason to act in accordance with them if we care about behaving politely. As Foot puts it:

> […] one may reasonably ask why anyone should bother about what should-e, (should from the point of view of etiquette) be done, and that such considerations deserve no notice unless reason is shown. So although people give as their reason for doing something the fact that it is required by etiquette, we do not take this consideration as in itself giving us reason to act (Foot 1972: 309)

In this sense, the norms of etiquette give us rules to follow but not reason to follow them.[37] Foot contrasts this with the supposed normative authority of morality: moral norms give people categorical reason to act morally, irrespective of whether they care about being moral. In Foot's words, moral norms have an 'automatic reason-giving force' that the norms of etiquette lack (*ibid*.). According to Pasnau's prescriptive interpretation, T1.1 describes an epistemic ideal, which implies that we ought to strive for causal knowledge of necessities. The question we may ask, then, is whether this prescription has reason-giving force. If not, Aristotle's epistemic ideal may be relegated to the status of etiquette: we could quite plausibly deny that we have any reason to strive for causal knowledge of necessities, aside from the fact that Aristotle claims that we do. If, on the other hand, we suppose that T1.1 attempts to describe a norm that we have reason to act in accordance with, we should hope that Aristotle is able to ground its normativity.[38]

---

[36] Cf. Barnes 1994: 92.

[37] See also Parfit 2011: II.310-314.

[38] Pasnau has little to offer on this topic, at least in respect of Aristotle. Pasnau merely claims that it is 'certainly plausible to suppose' that the ideal epistemic 'limit of human

1.6. Towards a resolution of T1.1's interpretative puzzle

I've argued that Taylor's interpretation of Aristotle's epistemic project chimes well with the demanding conditions Aristotle puts on knowledge in the *Posterior Analytics*. Aristotle is indeed concerned with accounting for a superlative epistemic state, one according to which we are said to be most knowing. However, on Taylor's reading, P1 still turns out to be straightforwardly false. Pasnau adds to Taylor's interpretation the thought that T1.1 might present a prescriptive epistemic ideal, such that P1 prescribes rather than describes the conditions under which we ought to take ourselves to know ideally. This has the distinct interpretative benefit of ensuring that Aristotle is not beholden to what we in fact think when we take ourselves to know (ideally or otherwise). As such, P1 cannot be claimed straightforwardly false. Nonetheless, an interpretation of T1.1 following Pasnau must address two further difficulties. First, if T1.1 offers a prescriptive epistemic ideal, why does Aristotle use descriptive language? Second, what reason do we have to strive for this epistemic ideal? What grounds its normativity?

The first difficulty has a straightforward but superficial solution: T1.1 describes an epistemic ideal that implies a prescription. On this view, T1.1 doesn't explicitly prescribe that we ought to strive for causal knowledge of necessities. Rather, Aristotle gives an account of an ideal form of knowledge, with the implication that we ought to strive for it in virtue of its being ideal. The second difficulty will take longer to resolve. In Chapter 2, I argue that Aristotle has grounds to argue that we ought not take ourselves to know ideally unless we take ourselves to have causal knowledge of necessities. To this end, Aristotle draws on a common idea about knowledge: that knowledge characteristically requires rational conviction. Since knowing requires rational conviction, knowing superlatively demands maximal rational conviction, and maximal rational conviction is only achieved when we know necessary truths by means of their causes. Consequently,

---

inquiry' would involve knowing causes (Pasnau 2013: 995) and has nothing to say about Aristotle's necessity condition.

we know superlatively only when we achieve causal knowledge of necessities. This has the distinct interpretative benefit of making clear how T1.1 both draws from but is not beholden to ordinary thoughts about ἐπιστήμη.[39] However, Aristotle's epistemic ideal is more demanding than this: it is not merely a superlative epistemic state, but a superlative epistemic state with a prescriptive aspect. But why ought we strive for causal knowledge or necessities? I draw out this worry in Chapter 3, through a consideration of Aristotle's epistemic ideal and his characterisation of the sophistic knower, who supposes that the sole value of any and all knowledge (or epistemic state) is instrumental on the value of making money through the appearance of wisdom. According to the sophist's account of knowledge and its value, whether or not we ought to strive for causal knowledge of necessities (or, for that matter, any epistemic state) depends on whether it serves the end of appearing wise. Given that we don't typically require causal knowledge of necessities to achieve this end, we have no reason to strive for Aristotle's epistemic ideal. Aristotle must therefore provide us with an account of the value of knowledge that vindicates his epistemic ideal, such that we have reason to strive to know without qualification.

This will be the work of Part II of this thesis, which argues that Aristotle grounds the prescriptive aspect of his epistemic ideal on the value of knowing without qualification. Otherwise put, we have reason to strive to know without qualification because knowing in this way has value. On this view, it may not be the case that Aristotle's epistemic ideal has categorical normativity, i.e. it may not be the case that, necessarily, we ought to strive for without qualification knowledge (or, in Foot's words, that Aristotle's epistemic ideal will have automatic reason-giving force). Nonetheless, we will be provided with reason to strive for Aristotle's epistemic ideal in virtue of its value, i.e. because knowing in this way is good for the knower.

Such an interpretation cannot be read straight off the text of the *Posterior Analytics*. Indeed, Aristotle only twice hints at the thought that without qualification knowledge should be thought about in terms of its value. In *Posterior Analytics* 2.19,

---

[39] Cf. Gifford 2000: 172, 174 *n*.10, 179 *n*.18.

Aristotle suggests that one epistemic state is more estimable (τίμιος) than another in virtue of its exactitude (ἀκριβεία) (99b33-34). He later claims that only non-demonstrative knowledge of the first principles of demonstrations (i.e. intellect, νοῦς) surpasses demonstrative knowledge in exactitude. From this, we might infer that intellect is of greater value than demonstrative knowledge, and that demonstrative knowledge is of greater value than other, less exact epistemic states. To know without qualification might thus be of value in virtue of its exactitude.[40] Elsewhere, Aristotle argues that universals are valuable because they make causes clear, and that universal demonstrations are thus more valuable than perception or thought (*APo* 1.31: 88a5-8). Aristotle's point here is that universals and universal demonstration are instrumentally valuable for achieving without qualification knowledge. As such, this passage suggests that without qualification knowledge might be valuable, but not why. The remainder of the *Posterior Analytics* at most suggests that to know without qualification is to be most knowing and that to be most knowing is to know best, just as one might be said to know philosophy better if one is more knowledgeable of philosophy. For example, Aristotle claims that:

T1.4 […] you cannot be better related to things of which there is a demonstration than by knowing them, nor can you know them without a demonstration (*APo* 1.22: 83b34-35)[41]

[…] ὧν δ' ἔστιν ἀπόδειξις, οὔτε βέλτιον ἔχειν ἐγχωρεῖ πρὸς αὐτὰ τοῦ εἰδέναι, οὔτ' εἰδέναι ἄνευ ἀποδείξεως

To know demonstrable objects by means of a demonstration is to know them best. But this is insufficient to ground the thought that there's something good about knowing without qualification. If I learn and understand everything there is to know about the history of the village of Wyverstone, then there is a sense in which I am most knowing of and the best knower with respect to the history of Wyverstone. But just because I'm the best knower in this respect, it doesn't follow that there's

---

[40] I return to the relationship between exactitude and value in §7.2.2.

[41] See also *APo* 1.2: 72a34.

anything good or valuable about my knowledge. As such, there may be no reason as to why others ought to strive to be the best knower in this respect. Similarly, then, when Aristotle describes without qualification knowledge as better or best, we should not suppose that Aristotle has offered an explanation of the value of without qualification knowledge, nor has he provided us with reason to strive for his epistemic ideal. Just as we must be given reason to adhere to the norms of etiquette and so become polite, Aristotle must provide reason for us to become more knowing.

In Chapter 3, I argue that Aristotle's juxtaposition of without qualification knowledge and the sophistic way of knowing in T1.1 is suggestive that questions about the value of knowledge are at the forefront of Aristotle's project in the *Posterior Analytics*. In Part II, I return to the question of the value of without qualification knowledge through a consideration of the value of theoretical wisdom in the *Nicomachean Ethics*, of which demonstrative knowledge is a constitutive part. In so doing, I offer two senses in which theoretical wisdom (and so without qualification knowledge) may be understood as valuable. As such, I offer two senses in which we have reason to strive for Aristotle's epistemic ideal.

1.7. Recent approaches to Aristotle's epistemic normativity

A central feature of my interpretation is that Aristotle's epistemological project has a normative aspect. In the *Posterior Analytics*, Aristotle sets out to describe an epistemic ideal and, in so doing, he implies that we ought to strive to achieve it. I have proposed that Aristotle's prescription is grounded on the value of this way of knowing. Several commentators have offered accounts of the normative aspects of Aristotle's epistemology. In this section I detail these, clarifying my interpretation in relation to each of them.

1.7.1. *Truth as a constitutive norm of belief*

Ian McCready-Flora (2013) argues that Aristotle held the view that 'a constitutive norm prescribing true belief [δόξα] binds all rational subjects' (McCready-Flora 2013: 69).[42] Constitutive norms 'define the structure of an endeavor and make it what it is' (*ibid.* 68). For instance, it's a constitutive norm of tennis that you don't hit the ball with your body. This norm structures the activity of playing tennis by demanding that you ought not hit the ball with your body. To accidentally do so would be to break this rule, but your intending to abide by it is also in part constitutive of your playing tennis: if you abandon your racket and try to play with your hands then not only will you break this rule, you won't even count as playing tennis. McCready-Flora argues that, for Aristotle, truth is a constitutive norm of belief: one believes correctly if and only if one's belief is true, and to aim at believing truly is partly constitutive of believing – it is a norm that 'one is subject to […] simply in virtue of playing the game' (*ibid.* 81).

This account of the normativity of belief presents a challenge to reading T1.1 as an epistemic ideal. According to McCready-Flora, Aristotle did not consider knowledge to be subject to genuine normativity: normativity that prescribes and automatically gives us reason to act (*ibid.* 67). Consequently, T1.1 could at best be an evaluative claim – a claim about a way of knowing that is better than other epistemic conditions – but Aristotle apparently did not think that value could ground an ought that has normative authority. If that's right, then we'd either be misguided in reading T1.1 as a prescriptive ideal, or Aristotle's prescription lacks genuine normative grounds. In the following I set out McCready-Flora's view and explain why we should be cautious of this conclusion.

Nicomachean Ethics 6 is McCready-Flora's starting point, where Aristotle claims that truth is the good condition (τὸ εὖ) of theoretical thought (*EN* 6.2*:* 1139a27-28). Indeed, truth is the function (ἔργον) of all discursive thought (1139a29). This is an evaluative claim: all discursive thought aims at truth and for discursive thought to arrive at truth is good in so far as it is valuable (McCready-Flora 2013: 72-73). But in *Nicomachean Ethics* 6.9, Aristotle makes the further claim that belief is subject to truth as a standard of correctness (ὀρθότης): beliefs can be

---

[42] See also Duncombe 2016: 122.

mistaken and a belief only meets its standard of correctness if it is true (*EN* 6.9: 1142b11). From this, McCready-Flora argues that truth as a standard of correctness governs belief as a constitutive norm. It is normative in so far as it demands that we ought to believe truly if we are to try and believe at all (McCready-Flora 2013: 74-76).

This marks an important distinction in McCready-Flora's line of thought. True beliefs may be valuable, for instance, because they often help us achieve our practical ends. But value doesn't entail normativity: it is good for non-human animals to perceive the world correctly in order to live, but it does not follow that they ought to do so (*ibid.* 74-76). And in the case of humans, true beliefs may be valuable for achieving our practical ends, but that we ought to believe truly does not follow straightforwardly from this evaluative claim. After all, there may be some other means by which we can achieve our ends: some of our practical concerns may at times even be better served by false beliefs. McCready-Flora instead argues that we ought to believe truly because making definite judgements is a constitutive part of the very activity of practical reasoning (*ibid.* 76-81). Rather than being a replaceable step in the process of achieving our aims, forming beliefs is the only means by which to rationally achieve our ends. If we are to act as rational animals then we must go about believing, and so we are bound by belief's constitutive norm.

This has problematic consequences if we wish to read Aristotle's epistemic ideal as prescriptive. Unlike belief, Aristotle claims that knowledge has no standard of correctness:

T1.5   […] for there is no standard of correctness of knowledge (since there is no error either) (*EN* 6.9: 1142b10)

[…] ἐπιστήμης μὲν γὰρ οὐκ ἔστιν ὀρθότης (οὐδὲ γὰρ ἁμαρτία)

Because it is factive, knowledge cannot err. But, as we have seen, McCready-Flora argues that a standard of correctness is necessary for normativity because it

structures the possibility for success and failure. What's worse, evaluative claims are supposedly incapable of properly grounding normativity. So even though truth is the good condition of knowledge – as it is for all discursive thought – and knowledge may be in some sense valuable, this does not place any genuine normative constraints on knowing. Reading T1.1 normatively, then, must face the challenge that Aristotle apparently subscribes to the view that knowledge is not governed by any genuine normativity. There may be nothing, to use Foot's words again, that could give T1.1 reason giving force.

But we should not be too hasty. First, as McCready-Flora notes, it is surprising for Aristotle to claim that knowledge has no standard of correctness (*ibid.* 73). And even though T1.5 is explicit about this, Aristotle's remarks in *Posterior Analytics* 1.5 should have us think again:

T1.6   It must not escape our notice that we often make mistakes and what we are trying to prove does not hold primitively [and] universally although we think we are proving it universally [and] primitively (*APo* 1.5: 74a4-6)

Δεῖ δὲ μὴ λανθάνειν ὅτι πολλάκις συμβαίνει διαμαρτάνειν καὶ μὴ ὑπάρχειν τὸ δεικνύμενον πρῶτον καθόλου, ᾗ δοκεῖ δείκνυσθαι καθόλου πρῶτον

In trying to know, sometimes we make a mistake: we think that we have proved something universally and primitively, but it escapes our notice that we have not. Although the mistake cited concerns whether we are right in thinking that we know, it is clear that our knowledge can also miss the mark if we fail to know something universally and primitively. In such circumstances, Aristotle claims that we may succeed in knowing in the sophistic way according to accident but fail to know without qualification (*APo* 1.5: 74a25-b4).[43] When we merely know according to accident (after all, the sophistic way is still a way of knowing) our knowledge has erred. And Aristotle's insistence that 'it *must not* escape our notice' makes clear that such mistakes stand in need of correction.

---

[43] I consider this case at length in §2.3.2.

So even though truth may not be the standard of correctness of knowledge, it seems clear that Aristotle understood knowledge to be subject to standards. For instance, we can be said to err and miss the mark when we fail to know something universally and primitively, i.e. when our knowledge fails to meet the strict criteria for knowing without qualification. And we may also challenge McCready-Flora's claim that Aristotle's knowledge norms are not (or cannot be) appropriately grounded on value. This is indeed a common approach to the contemporary problem of epistemic normativity: numerous authors have attempted to explain the force of epistemic norms in terms of goodness or value, such that we have reason to conform to epistemic norms because doing so is good or valuable.[44] Such views certainly have their philosophical problems, but so do accounts that ground epistemic normativity on the thought that truth is a constitutive norm of belief.[45] As such, we should not presuppose that the prescriptive aspect of Aristotle's epistemic ideal is not or cannot be grounded on the value of knowing without qualification. In Part II of this thesis, I argue just this: we have reason to know without qualification because such knowledge is valuable.

1.7.2. *Norms that keep inquiries on track*

Along different lines, James Lennox argues that Aristotle's methodological remarks in *Parts of Animals* 1 and *De Anima* 1.1 betray the fact that Aristotle subscribes to various norms for inductive inquiry. These norms specify the proper order of inquiry and are articulated in order to keep an inquiry 'on track' and 'self-correcting' (Lennox 2011: 27, 30-41). What's more, they are particular to the subject at hand: the norms for zoological inquiries are different from those for an inquiry into the soul. In each case, the appropriate norms are shaped and constrained by the particular 'nature of the object of inquiry and the nature of our cognitive access to that object' (*ibid.* 41).[46]

---

[44] See Steglich-Petersen 2011, cf. Côté-Bouchard 2017.

[45] Côté-Bouchard 2016.

[46] See *PA* 1.1: 639a1-b5, 1.4: 644b17-22.

Lennox does not specify what grounds the normativity of Aristotle's inductive norms. It might be the case, for instance, that they derive their normative force from a more general truth norm. Something along the lines of: we ought to seek out the truth, so we ought to act in accordance with the norms that keep our inquiries on track towards the truth. Alternatively, we might suppose that inquiring in a particular order is constitutive of doing that inquiry. On this view, you don't count as investigating the soul just in virtue of the fact that the soul is the object of your inquiry. In addition, you must also inquire in the right way, in the right order, according to the object's proper method (μέθοδος).[47] For instance, you could justifiably be said not to be studying physics if your research into physical laws consists solely in reading science fiction books. That doesn't count as doing physics, because it doesn't abide by the norms that constitute that inquiry. In such cases, the norms that keep an inquiry on track don't merely help to ensure that our inquiries are truth conducive; we must also abide by them to ensure that we count as undertaking the very inquiry that we intend to undertake.

On either reading, the force of Aristotle's norms of inquiry is conditional. On the first, adhering to the norms of a particular inductive inquiry depends upon a more general norm that we ought to seek out the truth. But this alone won't suffice: even if we ought, in general, to believe truly whenever we form beliefs, its implausible to claim that we ought to seek out and believe all truths. Some truths seem trivial, and others are potentially bad for us to believe. What reason do we have for inquiring into them all? We should thus be supplied with some further reason as to why we ought to seek out the particular truths an inquiry has to offer, e.g. why we ought to seek out truths about the soul, or truths about the natures of animals. Something similar can be asked about the second reading, according to which we ought to adhere to the norms of a particular inductive inquiry because those norms are constitutive of undertaking that inquiry: why ought we undertake the inquiry (and so adhere to its norms) in the first place? As Foot points out in the case of etiquette, some further reason must be given. If you are undertaking a particular zoological inquiry, then your inquiry should proceed in a certain order,

---

[47] See *DA* 1.1: 402a19-20.

such that you count as undertaking that inquiry. But if you have no reason to undertake that inquiry, then you have no reason to adhere to its norms.

This is also true when Aristotle declares in the *Metaphysics* that:

T1.7   And it is evident, then, that we must acquire knowledge of the original causes (for, we say that we know each thing when we think we know its primary cause) […] (*Met*. 1.3: 983a24-26)[48]

Ἐπεὶ δὲ φανερὸν ὅτι τῶν ἐξ ἀρχῆς αἰτίων δεῖ λαβεῖν ἐπιστήμην (τότε γὰρ εἰδέναι φαμὲν ἕκαστον, ὅταν τὴν πρώτην αἰτίαν οἰώμεθα γνωρίζειν) […]

Note the similarity with T1.1. In T1.1: we think we know each thing without qualification, when we think we know its cause and that it cannot be otherwise. In T1.7: we say that we know each thing only when we know its first cause. Aristotle's declaration can plausibly be described as a norm of inquiry: we *ought* to seek out knowledge of original causes, for we only know something when we know its first cause. But the scope of Aristotle's prescription is unclear. Aristotle has spent *Metaphysics* 1.1 arguing that wisdom (σοφία) – a certain, superlative epistemic condition – is knowledge of causes and first principles (982a1-3). At the beginning of *Metaphysics* 1.2, he then declares that:

T1.8   And since we are seeking this knowledge, this is what is to be investigated, namely, what sorts of causes and what sorts of first principles, the knowledge of which is wisdom. (*Met* 1.2: 982a4-5)

Ἐπεὶ δὲ ταύτην τὴν ἐπιστήμην ζητοῦμεν, τοῦτ' ἂν εἴη σκεπτέον, ἡ περὶ ποίας αἰτίας καὶ περὶ ποίας ἀρχὰς ἐπιστήμη σοφία ἐστίν.

It is necessary to inquire into the nature of wisdom *because we are seeking this knowledge*. Here, as in T1.7, further reason must be supplied such that we ought to seek this knowledge at all. If we are seeking wisdom then we ought to inquire into original causes, but we may have no reason to seek the wisdom characteristic of

---

[48] Translations from the *Metaphysics* follow Reeve 2016.

first philosophy. Similarly in the case T1.1: Aristotle must supply us with further reason as to why we ought to strive for causal knowledge of necessities. In Part II, I return to the *Metaphysics* and also to the *Nicomachean Ethics* to explain the value that underwrites this prescription. And in Chapter 7, I assess Aristotle's account of the value of knowing the proper objects of theoretical wisdom. On this view, we have reason to know the proper objects of theoretical wisdom because such objects are good for the theoretically wise person to know.

1.7.3. *Epistemic norms and epistemic virtues*

Miira Tuominen offers an appraisal of the normative elements of Aristotle's epistemology in light of Quinean naturalized epistemology and Descartes' normative epistemological project. Tuominen argues that Aristotle's approach to knowledge is both descriptive and normative (Tuominen 2015: 67) and it is normative in a manner quite different to that of Descartes: 'As Cartesian epistemology wishes to secure an indubitable basis for all knowledge, its important normative element is related to certainty and immunity to sceptical doubt' (*ibid.* 86). Not so for Aristotle, whose approach to knowledge and our cognitive capacities betray little concern with sceptical arguments and the justificatory role of conviction. Instead, 'the source of normativity in Aristotle's account is derived from the close connection between certain cognitive capacities, dispositions or states, and truth, supreme truth or explanatory power' (*ibid.*).

Take intellect (νοῦς) as an example. Intellect is a higher cognitive state than demonstrative knowledge because it is concerned with first principles. First principles are, in Aristotle's own terms, more knowable than the conclusions of demonstrations and they are explanatory of them, such that intellect is more exact and truer (ἀληθέστερον) than demonstrative knowledge.[49] Tuominen's thought, then, is that there is an evaluative aspect to Aristotle's treatment of epistemic states, such that one epistemic state is better than another if it exceeds it in relation to exactitude, truth, and/or explanatory power. Such epistemic states have, we might

---

[49] *APo* 2.19: 100b5-12, 1.2: 71b25-72a5, *EN* 6.7: 1141a12-22.

say, a better grasp of reality. And Tuominen, similarly to Pasnau, also adds a strictly normative dimension: causal knowledge and knowledge of essences is something that we ought to strive for (*ibid.* 86). Consequently, Tuominen understands intellect and demonstrative knowledge as epistemic virtues, and they are virtues because of their 'specific relation to external reality' (*ibid.* 87). Tuominen does not specify why we should try to achieve these virtues. But we may infer that it is because of their particular relation to external reality, i.e. on account of their being most exact, supremely true, or ultimately explanatory.

My view is broadly speaking compatible with Tuominen's: superlative epistemic states such as demonstrative knowledge and theoretical wisdom are valuable in part (i) because they are virtuous epistemic states and (ii) in virtue of their particular relationship to truth. And I consider these aspects of demonstrative knowledge and theoretical wisdom to ground the prescriptive aspect of Aristotle's epistemic ideal. Tuominen, however, has little more to say about how the virtuous nature of these states grounds both their value and the prescription that we ought to strive for them. What's good about being epistemically virtuous? And what's of value about having a particularly exacting and true account of reality? In Part II, I tackle these questions at length. In particular, I argue that epistemic virtue is valuable because it transforms the proper objects and activities of knowing into something good for the knower.

1.8. Conclusion

In this chapter, I have outlined my interpretation of Aristotle's epistemological project in the *Posterior Analytics*, according to which T1.1 presents an epistemic ideal. This ideal has both a descriptive and a prescriptive aspect. It is descriptive in so far as it attempts to describe a superlative epistemic state: to know without qualification is to be most knowing, i.e. to know the most knowable objects in the most knowing way. And it is prescriptive in so far as it implies that we ought to strive for it. In the next chapter, I argue that Aristotle grounds the descriptive aspect of his epistemic ideal on a common idea about knowledge: that knowledge

characteristically requires rational conviction. The remainder of this thesis is dedicated to explaining the prescriptive aspect. I argue that we have reason to strive for Aristotle's epistemic ideal because achieving it is of value.

2. Knowledge and rational conviction

2.1. Introduction

In Chapter 1, I argued that T1.1 describes an epistemic ideal such that to know without qualification is a superlative epistemic state. I also argued that this ideal implies a prescription: in virtue of being the ideal epistemic state, we have reason to strive for causal knowledge of necessities. On this reading, T1.1 moves from a description of what we think when we think we know ideally (P1) to what is in fact true when we know ideally (C). The problem remains, however, that P1 is straightforwardly false: there was apparently no consensus (philosophical or otherwise) about the conditions under which Aristotle's predecessors and contemporaries took themselves to know ideally. As such, a story needs to be told about how Aristotle's epistemic ideal in fact relates to something that Aristotle's predecessors and contemporaries might have agreed to about knowledge.

In this chapter, I argue that Aristotle draws upon a common idea about knowledge found in both philosophic and forensic literature: that when we know, we are rationally convinced of what we take to be true. Indeed, some form of rational conviction distinguishes knowledge from other factive but lesser epistemic states, e.g. true opinion and the sophistic way of knowing according to accident. Aristotle exploits this intuition in his account of the ideal epistemic state: since knowledge characteristically involves rational conviction, the superlative epistemic condition (i.e. to be most knowing) will involve maximal rational conviction. And, on Aristotle's view, we achieve maximal rational conviction when we know necessary truths by means of their causal explanations and know them as such. Aristotle thus has the resources to argue that we ought not to take ourselves to know ideally unless we take ourselves to have causal knowledge of necessities. Accordingly, Aristotle's account of the epistemic ideal is not divorced from ordinary ideas about knowledge. Rather, it is informed by the thought that, in trying to know, we seek rational conviction in what we take to be true.

I first consider descriptions of knowledge in both philosophic and forensic literature. I argue that knowledge was characteristically understood to involve some form of rational conviction and that this feature distinguishes knowledge from lesser epistemic states (§2.2). I then argue that Aristotle employs this idea about knowledge as the basis for his account of without qualification knowledge. When we know without qualification, we are not only rationally convinced of what we take to be the case, but we are maximally rationally convinced. And we achieve maximal rational conviction when (i) what we know cannot be otherwise, (ii) we know its cause, and (iii) we know it as such. In so doing, we isolate the very reason why the object of our knowledge couldn't be otherwise (§2.3). Finally, I consider my interpretation in light of a worry: just as Aristotle was not so much concerned with epistemic justification and warrant, nor was he interested in rational conviction. Rather, the *Posterior Analytics* primarily focuses on standards of explanation. I argue that Aristotle's views about conviction and explanation in fact come together: we gain maximal rational conviction in virtue of grasping causal explanations that explain why the object of our knowledge could not be other than it is (§2.4)

2.2. Rational conviction in philosophic and forensic literature

In this section, I argue that knowledge was commonly understood to require rational conviction. This is in contrast to lesser epistemic states such as opinion (δόξα). One feature that both knowledge and opinion have in common is that both knowers and opiners take something to be true.[50] For example, if I know that *p*, then I take it to be true that *p*. The same holds if I merely opine that *p*. Of course, in either case my degree of confidence might vary. If I do not take myself to know that *p*, then I might not be confident that *p*. Contrawise, if I merely have an opinion that *p*

---

[50] I'm in broad agreement with Jessica Moss and Whitney Schwab's conclusion that δόξα is not equivalent to our concept of belief, at least in Plato and Aristotle (Moss & Schwab forthcoming). Indeed, belief is something that knowledge and opinion have in common. Typically, if one either knows or opines that *p*, then one believes that *p* (i.e. takes *p* to be true). For Aristotle, knowledge and opinion are both types of judgement or belief (ὑπόληψις, *DA* 3.3: 427b24-26). Cf. Vogt 2012.

but take myself to know, then I might be extremely confident that *p*. Nonetheless, in either case I take it to be true that *p*. What distinguishes knowledge from opinion is that, if one knows that *p*, either (i) one's confidence in the truth of *p* is rationally grounded or (ii) one has rational grounds to be confident that *p*.[51] This is in addition to the factivity of knowledge: truth distinguishes knowledge from *mere* opinion; rational conviction further distinguishes knowledge from *true* opinion. According to this view, knowledge and opinion are mutually exclusive states, and knowledge is superior (at least in part) because it is rationally grounded. I argue that there is evidence for this common understanding of the distinction between knowledge and opinion in both philosophic and forensic literature. As such, it provides Aristotle with a common presumption about knowledge from which to derive his account of what it is to know without qualification.

2.2.1. Knowledge in philosophic literature

First consider Parmenides' description of the opinions of mortals:

T2.1   It is right that you learn all things
both the unshaken heart of well-rounded truth
and the opinions of mortals, in which there is no true conviction.
But nonetheless you shall learn these things too, as what is believed
would have to be assuredly, pervading all things throughout. (B1.28-32)[52]

χρεὼ δέ σε πάντα πυθέσθαι
ἠμὲν Ἀληθείης εὐκυκλέος ἀτρεμὲς ἦτορ
ἠδὲ βροτῶν δόξας, ταῖς οὐκ ἔνι πίστις ἀληθής.
ἀλλ᾽ ἔμπης καὶ ταῦτα μαθήσεαι, ὡς τὰ δοκοῦντα
χρῆν δοκίμως εἶναι διὰ παντὸς πάντα περῶντα.

---

[51] I include (ii) to allow for the possibility that one might know that *p* but not be confident that *p*. It's not clear to me that either Plato or Aristotle would have been comfortable with the thought that one could know but be unaware of one's knowledge (*Euthydemus*: 295a6-9, *APo* 2.19: 99b22-27, cf. McCabe 2009). Nonetheless, I allow for it as an interpretative possibility.

[52] Translation following Kirk *et al* 1983. Some manuscripts read "well-persuasive" (εὐπείθεος) in place of "well-rounded" (εὐκυκλέος).

Here Parmenides draws a distinction between the unshaken heart of truth and mortal opinions, the latter of which lack true conviction (πίστις ἀληθής). Notably, Parmenides' invocation of true conviction need not imply that mortals are simply unconvinced of what they opine. Indeed, Parmenides elsewhere describes mortals as persuaded of the truth of generation and corruption, and of being and not being (B8.38-41). As such, mortals don't lack true conviction because they lack the psychological state of conviction. Rather, mortal opinions differ from the way of truth in virtue of the fact that the way of truth involves conviction that is real or genuine (i.e. true). Hence Parmenides describes the path of persuasion as accompanying truth (πειθοῦς κέλευθος […] Ἀληθείηι ὀπηδει) (B2.4): when one follows the path of truth, one is persuaded such that one's conviction is true.

Did Parmenides consider true conviction to be a characteristic feature of knowledge? We should perhaps be cautious about this conclusion. Parmenides is primarily concerned with distinguishing mortal opinions from the unshaken heart of truth – something that we may infer is a divine epistemic state. As such, it's not clear that Parmenides' characterisation of the way of truth and the way of opinion is intended to map straightforwardly onto a distinction between human knowledge and human opinion. Indeed, Parmenides has the goddess describe the cosmology of mortals as something known (οἶδα B10.1-5, cf. B6.4-6). Given this, we might conclude that some mortal opinions are instances of human knowledge.[53] Nonetheless, Parmenides certainly intends to distinguish between two epistemic paths, one of which is superior to the other. This much is clear from Parmenides' description of the way of opinion as that upon which mortals 'wander, knowing nothing, two-headed' because they are crucially mistaken about the distinction between being and not-being (εἰδότες οὐδὲν πλάττονται, δίκρανοι, B6.4-5). So even if Parmenides' distinction between the way of truth and way of opinion is not intended to distinguish between human knowledge and human opinion, Parmenides nonetheless distinguishes a superior epistemic condition from a lesser

---

[53] On the relationship between the mortal and the divine in Parmenides' poem, see Tor 2015.

one. And true conviction is a characteristic feature of this superior epistemic condition, only achieved when one follows the path of truth.

We find similar themes in Plato, albeit without references to conviction. Take, in the first case, Socrates' account of true opinion in the *Meno*:

T2.2   For, also, true opinions, as long as they remain, are fine things and everything they produce is good; but they do not want to stay for much time, and they run away from the soul of humans, such that they are not worth much, until someone tethers them by accounting for the reason why. And this, Meno my friend, is recollection, as we previously agreed. Whenever they are tethered, first they become knowledge, and then steadfast; and this is why knowledge is of greater value than correct opinion, and knowledge differs from correct opinion in being tethered. (*Meno*: 97e6-98a8)[54],[55]

καὶ γὰρ αἱ δόξαι αἱ ἀληθεῖς, ὅσον μὲν ἂν χρόνον παραμένωσιν, καλὸν τὸ χρῆμα καὶ πάντ' ἀγαθὰ ἐργάζονται· πολὺν δὲ χρόνον οὐκ ἐθέλουσι παραμένειν, ἀλλὰ δραπετεύουσιν ἐκ τῆς ψυχῆς τοῦ ἀνθρώπου, ὥστε οὐ πολλοῦ ἄξιαί εἰσιν, ἕως ἄν τις αὐτὰς δήσῃ αἰτίας λογισμῷ. τοῦτο δ' ἐστίν, ὦ Μένων ἑταῖρε, ἀνάμνησις, ὡς ἐν τοῖς πρόσθεν ἡμῖν ὡμολόγηται. ἐπειδὰν δὲ δεθῶσιν, πρῶτον μὲν ἐπιστῆμαι γίγνονται, ἔπειτα μόνιμοι· καὶ διὰ ταῦτα δὴ τιμιώτερον ἐπιστήμη ὀρθῆς δόξης ἐστίν, καὶ διαφέρει δεσμῷ ἐπιστήμη ὀρθῆς δόξης.

Meno wonders why we value knowledge over true opinion, given that true opinions will always guide our actions correctly. He even wonders whether true opinion and knowledge are in any way different (97c11-d3). Socrates responds to Meno's first question: knowledge is more valuable than true opinion because, unlike true opinion, knowledge is steadfast and does not escape us. Indeed, true opinions are only really worth having once they have been tied down by giving an account of the cause.[56]

Socrates does not here appeal to being convinced, but perhaps this is to be expected: throughout the Platonic *Corpus*, persuasion is frequently understood as

---

[54] Translations from the *Meno* follow Grube in Cooper 1997.

[55] See also *Euthyphro* 11b-d.

[56] I return to Plato's value problem at length in §4.2.

antithetical to knowledge (e.g. *Theaetetus*: 201a-c, *Gorgias*: 454a-455a, *Timaeus*: 51e) and conviction is clearly considered to be a lesser epistemic state than knowledge (*Republic* 6: 509d, 511d-e). Nonetheless, Socrates' account of the value of knowledge is readily understood in terms of rational conviction. To see this, it's first worth noting that Socrates' claim that knowledge is steadfast or stable (μόνιμος) should strike us as odd. As Gail Fine points out, it's quite plausible that someone could stubbornly or dogmatically hold onto what they merely opine, be it true or false. In so far as one can be subjectively certain of what one opines, then, true opinion can plausibly be just as persistent and steadfast as knowledge. As such, Fine suggests that the stability Socrates has in mind is not mere subjective certainty, but rather a form of rational confidence (Fine 2004: 72-74).[57] Both someone who knows that *p* and someone who merely opines that *p* can be subjectively certain that *p*. What distinguishes the knower from the true opiner, however, is that the knower possesses rational confidence that *p*, on account of the fact that the knower has an account of the reason why. As such, someone who knows will more likely survive refutation (*Republic* 7: 534b-d), whereas someone with mere true opinion may be persuaded out of their true opinion by argument (*Republic* 3: 413b, cf. *Euthyphro*: 11b-d). In so doing, Socrates distinguishes *mere* conviction or confidence that *p*, from *rational* conviction or confidence that *p*, i.e. conviction that is grounded by an account of the reason why. The latter is characteristic of knowledge and the former of mere opinion.[58]

Interpreting T2.2 in terms of rational confidence is further supported by Socrates' later assessment of his explanation of the value of knowledge:

---

[57] See also Fine 2010b: 330, Perin 2012: 21.

[58] Whitney Schwab argues convincingly that ἐπιστήμη in the *Meno* is best understood as "understanding" rather than "knowledge" (Schwab 2015). However, given my translation of ἐπιστήμη in the *Posterior Analytics*, I translate ἐπιστήμη as "knowledge" in the *Meno* to make clear that Plato and Aristotle are in some sense talking about the same epistemic state. Nonetheless, I'm in agreement with Schwab that the *Meno* is not concerned with explicating the justificatory grounds for knowledge (*pace* Fine 2004). This is consistent with the thought that T2.2 distinguishes between rational conviction and mere conviction: rational conviction need not be understood in terms of epistemic justification.

T2.3   Indeed, I too speak as one who does not have knowledge but is guessing. However, I certainly do not think I am guessing that right opinion is a different thing from knowledge. If I claim to know anything else – and I would claim *that* about few things – I would put this down as one of the things I know. (*Meno*: 98b1-5)

Καὶ μὴν καὶ ἐγὼ ὡς οὐκ εἰδὼς λέγω, ἀλλὰ εἰκάζων· ὅτι δέ ἐστίν τι ἀλλοῖον ὀρθὴ δόξα καὶ ἐπιστήμη, οὐ πάνυ μοι δοκῶ τοῦτο εἰκάζειν, ἀλλ' εἴπερ τι ἄλλο φαίην ἂν εἰδέναι – ὀλίγα δ' ἂν φαίην – ἓν δ' οὖν καὶ τοῦτο ἐκείνων θείην ἂν ὧν οἶδα.

Socrates, with his talk of runaway statues, represents true opinion and knowledge through an image or likeness (εἰκάζω). He does not take himself to know why knowledge is more valuable than true opinion – and, perhaps, even *that* knowledge is more valuable than true opinion – and so must make a guess. As a consequence, he will not claim to know that knowledge is more valuable than true opinion: it is something he is unsure about. But he will nonetheless stand fast on the thought that knowledge and opinion are different: he takes himself to know this. In so doing, Socrates perhaps ascribes to a version of the knowledge norm of assertion: assert that *p* only if you know that *p* (or, rather: assert that *p* only if you take yourself to know that *p*).[59] Indeed, Socrates and Meno continue their discussion without assuming that knowledge is in fact of greater value than true opinion in respect of successful action (98c *ff.*) Implicit, then, is the thought that one ought not be convinced of what one merely opines, because only knowledge affords rational confidence. As such, whereas one may be convinced or subjectively certain of either what one knows or what one merely opines, one's conviction is rationally grounded only if one knows.

In both Parmenides and Plato, then, we find the following ideas: (i) that knowledge is a superior epistemic condition to opinion; (ii) that one may be convinced of either what one knows or what one opines; and (iii) that only knowledge involves true conviction (Parmenides) or only knowledge is stable

---

[59] For discussion, see Williamson 2000: ch.11.

because it involves rational confidence (Plato). In both cases, only knowledge is such that one has good grounds to be confident about what one takes to be true.

2.2.2. *Knowledge in forensic literature*

We find similar allusions to the difference between knowledge and opinion in forensic literature. Take, for example, a passage from Gorgias' *A Defence on Behalf of Palamedes*:

T2.4   It follows that since you do <not> have knowledge, you have an opinion. Do you then, most daring of all people, trusting in opinion, a most untrustworthy thing, not knowing the truth, dare to bring a capital charge against a man? Why do you share knowledge that he has done such a deed? But surely it is common to everyone to have opinions on all subjects, and in this you are no wiser than others. But it is not right to trust those with an opinion instead of those who know, nor to think opinion more trustworthy than truth, but rather truth than opinion. (*Palamedes*: 11a.149-156)[60]

τὸ δὴ λοιπὸν <οὐκ> εἰδότα σε δοξάζειν. εἶτα, ὦ πάντων ἀνθρώπων τολμηρότατε, δόξηι πιστεύσας, ἀπιστοτάτωι πράγματι, τὴν ἀλήθειαν οὐκ εἰδώς, τολμᾶις ἄνδρα περὶ θανάτου διώκειν; ὧι τί τοιοῦτον ἔργον εἰργασμένωι σύνοισθα; ἀλλὰ μὴν τό γε δοξάσαι κοινὸν ἅπασι περὶ πάντων, καὶ οὐδὲν ἐν τούτωι σὺ τῶν ἄλλων σοφώτερος. ἀλλ' οὔτε τοῖς δοξάζουσι δεῖ πιστεύειν ἀλλὰ τοῖς εἰδόσιν, οὔτε τὴν δόξαν τῆς ἀληθείας πιστοτέραν νομίζειν, ἀλλὰ τἀναντία τὴν ἀλήθειαν τῆς δόξης.

Gorgias here appeals to the thought that opinion is untrustworthy (ἄπιστος). Those who merely opine should not trust or be convinced of what they opine, and we should not trust those with an opinion over those who know the truth. We find similar thoughts in the *Encomium of Helen*:

T2.5   So that on most subjects most people take opinion as counselor to their soul. But since opinion is slippery and unstable it casts those employing it into slippery and unstable successes. (*Helen*: 11.69-72)

---

[60] Translations of Gorgias following Kennedy in Sprague 1972.

ὥστε περὶ τῶν πλείστων οἱ πλεῖστοι τὴν δόξαν σύμβουλον τῆι ψυχῆι παρέχονται. ἡ δὲ δόξα σφαλερὰ καὶ ἀβέβαιος οὖσα σφαλεραῖς καὶ ἀβεβαίοις εὐτυχίαις περιβάλλει τοὺς αὐτῆι χρωμένους.

Gorgias offers no explanation as to why opinion is slippery and unstable; but it is nonetheless clear that he considers it less trustworthy than knowledge. Even though we might often trust in opinion, we shouldn't: for opinion leads to slippery and unstable successes. In so doing, Gorgias reflects the sentiments of both Parmenides and Plato that knowledge is a superior epistemic condition, because knowledge grants us good grounds to be confident in what we take to be true. And in spite of the fact that both of these passages are drawn from mythological defences, we can nonetheless imagine that Gorgias would have expected his sentiments to be well received by a jury. As such, we might suppose that these passages express a broadly accepted thought about the distinction between knowledge and opinion: that knowledge is a trustworthy epistemic state that is deserving of conviction, whereas opinion is not.

Although the instability of opinion is not elsewhere cited by forensic authors, appeals are frequently made to knowledge that is possessed clearly (σαφῶς),[61] exactly (ἀκριβῶς),[62] and well (εὖ) or best (ἄριστα).[63] Aeschines, for instance, suggests that there is no need for further arguments or witnesses when someone knows clearly (σαφῶς οἶδεν) (*Against Timarchus*: 78). Similarly, Aeschines describes the Council of Aeropagus as the most exact (ἀκριβεστάτῳ) council: they do not base their judgements on the arguments given and witnesses alone, but they use what they themselves know and their own examinations; and there is nothing

---

[61] Antiphon *First Tetralogy*: 3.10, *Against the Stepmother*: 6-8, *On the Murder of Herodes*: 67, 84, Demosthenes *Against Neaera*: 124, *Against Aphobus*: 1, 27, Gorgias *A Defence on behalf of Palamedes*: 11a.21-23, Isaeus *On the Estate of Apollodorus*: 34, *On the Estate of Ciron*: 4. Cf. Xenophanes B34, Thucydides *History of the Peloponnesian War*: 1.22.4.

[62] Antiphon *On the Chorus Boy*: 14, 18, Demosthenes *Appeal Against Eubulides*: 4, *Against Aphobus*: 1, 7, 40, *Against Callicles*: 3, Isaeus *On the Estate of Ciron*: 17.

[63] Aeschines *Against Timarchus*: 89-90, Antiphon *Against the Stepmother*: 6, Lysias *On the Death of Eratosthenes*: 1, *Against Pancleon*: 13.

more convincing than what you yourself know (αὐτοὶ σύνιστε, *ibid.* 92-93). Such appeals are often made in light of the fact that it is difficult to judge whether the claims being made in forensic contexts are trustworthy or not (Antiphon *First Tetralogy*: 1.1, 4.8).[64] For example, when a murder is committed in secret such that there are no witnesses, we must make a decision about what happened solely on the basis of the prosecutor and defendant's testimonies. In such cases, it's not possible to know clearly (σάφα εἰδότας) and we must, instead, judge what most likely happened (εἰκάζω, Antiphon *On the Chorus Boy*: 18, cf. Socrates' words in T2.3).[65] Given the difficulty of determining the truth in forensic contexts, orators thus distinguish supposedly superior epistemic states from lesser ones. And features such as clarity, exactitude, and the notoriety or supposed good character of the claimant, are each employed as criteria (albeit presumably defeasible criteria) for judging whether or not someone knows. As such, these criteria afford us a degree of trust in the claims being made. In these cases, then, we similarly see a privileging of epistemic properties that (purportedly at least) provide us with grounds for confidence in the claims being made. And, on this view, what distinguishes lesser epistemic states from superior ones, is that the latter provide us with better grounds for conviction.

2.3. Making a case for P1

Thus far, I've argued that there was a common presumption about knowledge (or, broadly speaking, about better epistemic states) amongst Aristotle's predecessors and contemporaries, according to which knowledge requires being (in some sense or other) rationally convinced of what one takes to be true. In this section, I argue that P1 is based on this common presumption. For clarity, I restate Aristotle's argument in T1.1 (see §1.3):

---

[64] Cf. *On the Chorus Boy*: 9

[65] Cf. *On the Murder of Herodes*: 75, Aeschines *Against Timarchus*: 119

(P1)   When we think that we know something without qualification, we think that we know its cause and we think (that we know?) that it cannot be otherwise;

(C)   Therefore: When we know something without qualification, we know its cause and (we know that?) it cannot be otherwise.

I propose that Aristotle might have argued for P1 as follows:

Argument for P1

(i)   We take ourselves to know when we take ourselves to be rationally convinced;

(ii)   To know without qualification (i.e. to know ideally) is a superlative epistemic state;

(iii)   We take ourselves to know superlatively when we take ourselves to be maximally rationally convinced;

(iv)   We take ourselves to be maximally rationally convinced when we take ourselves to know something that cannot be otherwise and its cause;

(v)   Therefore: We take ourselves to know without qualification (i.e. ideally) when we take ourselves to know something that cannot be otherwise and its cause.

Might Aristotle have made this argument for P1? In favour of supposing so is that it gives Aristotle good grounds for P1, and thus Aristotle's account of without qualification knowledge in T1.1. But what of the premises? Premise (i) states a common idea about knowledge and the conditions under which we take ourselves to know (argued for in §2.2). Premise (ii) is a restatement of the thought that to know without qualification is a superlative epistemic state (argued for in §1.5.1). Premise (iii) takes the common presumption about knowledge to its extreme: we take ourselves to know something most when we take ourselves to be maximally rationally convinced. Premise (iv) stands in need of motivation. It will thus be my focus in what follows.

Before continuing, however, it's worth noting that premise (iv) cannot be a literal statement of the conditions under which we take ourselves to be maximally rationally convinced. As argued, there is little evidence that Aristotle's contemporaries considered causal knowledge of what cannot be otherwise to be necessary either to know or to know ideally (§§1.4-5). Consequently, I argue that Aristotle considered causal knowledge of necessities to be a requirement of maximal rational conviction and, as such, that these are the conditions under which we ought to take ourselves to be maximally rationally convinced. As such, premise (iv) speaks for "us": we think that we know something ideally when we take ourselves to have achieved maximal rational conviction, and we only achieve maximal rational conviction (so Aristotle claims) when we know necessary truths by means of their causal explanations. Accordingly, Aristotle's view is that we ought not to take ourselves to know ideally unless we take ourselves to have causal knowledge of necessities.

2.3.1. *Rational conviction and necessary truths*

Premise (iv) claims that we have not achieved maximal rational conviction unless we have grasped something that cannot be otherwise (i.e. a necessary truth) and have grasped it as such. This hinges on the thought that necessary truths warrant a greater degree of rational conviction than contingent truths. Why so?

Aristotle makes clear that statements (λόγοι) and opinions (δόξα) come to be either true or false when the thing that they are about changes. For example, my opinion that "Socrates is sitting" is true when Socrates is sitting and becomes false when Socrates ceases to be sitting (*Cat* 5: 4a34-19, *Met* 9.10: 1051b13-18). As such, my opinion comes to have a contrary property (falsity) when the thing itself changes. In virtue of this, if the object of my cognition is a contingent truth, there is a sense in which my grasp of it is unstable: if the thing itself changes (in the relevant

sense) then my grasp of it is rendered false.[66] Precisely this thought is suggested by Aristotle's account of demonstrative knowledge in *Nicomachean Ethics* 6.3:

T2.6   And so what knowledge is [will] henceforth be apparent, if it is necessary to speak exactly and not be guided by likenesses. For we all suppose that what we know does not admit of being otherwise; whereas things that do admit [of being] otherwise, whenever they fall outside of our observation, it escapes [our] notice whether they are or not. Hence what is knowable is from necessity. Hence [it is] eternal; for things that are unconditionally necessary are all eternal, and eternal things do not come to be or pass away. (*EN* 6.3: 1139b18-24)

ἐπιστήμη μὲν οὖν τί ἐστιν, ἐντεῦθεν φανερόν, εἰ δεῖ ἀκριβολογεῖσθαι καὶ μὴ ἀκολουθεῖν ταῖς ὁμοιότησιν. πάντες γὰρ ὑπολαμβάνομεν, ὃ ἐπιστάμεθα, μηδ' ἐνδέχεσθαι ἄλλως ἔχειν· τὰ δ' ἐνδεχόμενα ἄλλως, ὅταν ἔξω τοῦ θεωρεῖν γένηται, λανθάνει εἰ ἔστιν ἢ μή. ἐξ ἀνάγκης ἄρα ἐστὶ τὸ ἐπιστητόν. ἀίδιον ἄρα· τὰ γὰρ ἐξ ἀνάγκης ὄντα ἁπλῶς πάντα ἀίδια, τὰ δ' ἀίδια ἀγένητα καὶ ἄφθαρτα.

This passage has a number of similarities with Aristotle's account of without qualification knowledge in *Posterior Analytics* 1.2. In the first case, just as T1.1 describes what it is to know without qualification, Aristotle here sets out to make clear what knowledge is, speaking exactly and not being guided by likenesses. Similarly, then, we might suppose that Aristotle is describing knowledge in the strict sense, without qualification. Second, Aristotle again reports something that we all suppose about knowledge: that what we know doesn't admit of being otherwise. And his explanation of this is telling. When it comes to contingent facts, we are unable to tell whether they are true or false once they are out of our purview. This passage suggests, then, that we take ourselves to know in the strict sense, only when what we know cannot be otherwise, and this is because necessary truths do not change their truth value, such that we can always be sure that they are true. Otherwise put, our cognitive grasp of necessary truths is more stable than our

---

[66] See also Fine 2010b: 331.

grasp of contingent truths in virtue of the fact that the truth value of necessary truths is stable.[67]

Of course, it might be objected that we can nonetheless be maximally rationally convinced of contingent truths. I can, after all, be maximally rationally convinced that Socrates is sitting in virtue of observing Socrates sitting in ideal circumstances, with ideal perceptual powers, etc. But Aristotle need not deny this. He need only claim that necessary truths afford greater rational conviction than contingent truths because we can remain sure of the truth of the former but not the latter when they are out of our purview. Indeed, Aristotle does not deny that we can know contingent truths. Take, for example, *Metaphysics* 7.15, in which Aristotle argues that there is neither definition nor demonstration of perceptible and particular substances (1039b27-31):

T2.7   And so, if both demonstration is of necessities and definition is knowable, and if, just as knowledge cannot be knowledge at one time and ignorance at another (rather, opinion is this sort of thing), so neither does demonstration nor definition admit of this, then it is clear that there will be neither definition nor demonstration of these things. For, both things that pass away are unclear to those who have knowledge [of them], whenever they have departed from perception; and, although the accounts are preserved in the soul the same, there will not be either definition not demonstrations. (*Met* 7.5: 1039b31-1040a5)[68]

εἰ οὖν ἥ τ' ἀπόδειξις τῶν ἀναγκαίων καὶ ὁ ὁρισμὸς ἐπιστημονικόν, καὶ οὐκ ἐνδέχεται, ὥσπερ οὐδ' ἐπιστήμην ὁτὲ μὲν ἐπιστήμην ὁτὲ δ' ἄγνοιαν εἶναι, ἀλλὰ δόξα τὸ τοιοῦτόν ἐστιν, οὕτως οὐδ' ἀπόδειξιν οὐδ' ὁρισμόν, ἀλλὰ δόξα ἐστὶ τοῦ ἐνδεχομένου ἄλλως ἔχειν, δῆλον ὅτι οὐκ ἂν εἴη αὐτῶν οὔτε ὁρισμὸς οὔτε ἀπόδειξις. ἄδηλά τε γὰρ τὰ φθειρόμενα τοῖς ἔχουσι τὴν ἐπιστήμην, ὅταν ἐκ τῆς αἰσθήσεως ἀπέλθῃ, καὶ σῳζομένων τῶν λόγων ἐν τῇ ψυχῇ τῶν αὐτῶν οὐκ ἔσται οὔτε ὁρισμὸς ἔτι οὔτε ἀπόδειξις

---

[67] See also *APr* 2.21: 67b1, *Top* 5.3: 131b21-23, *Met* 7.10: 1036a2-7. I'll return to Aristotle's account of knowledge in *EN* 6.3 (§3.3.3).

[68] Trans. following Reeve 2016.

Aristotle does not here deny that one cannot know perceptible, perishable things in some sense. Rather, he claims that perishable things are unclear to the person who has knowledge (τοῖς ἔχουσι τὴν ἐπιστήμην) when they are beyond the purview of the perceiver. As such, they are not the kind of thing that can be known demonstratively. Indeed, in *Posterior Analytics* 1.8 Aristotle claims that it is possible to know perishable things in an attenuated sense, i.e. according to accident (75b24-26). When we know something perishable according to accident, one of the premises of the deduction in virtue of which we know is perishable, i.e. it is rendered false when its object changes (in the relevant sense) or ceases to exist. For example, we might know that "this triangle has internal angles equal to two right angles (2R)" in virtue of the fact that it is a triangle and 2R belongs universally and as such to all triangles. In this case, the premise "this triangle has 2R" is perishable: if "this triangle" either ceases to be or ceases to be a triangle, then the known conclusion will perish along with it. As such, one can only know that it is true now (75b21-30).[69] In both the *Posterior Analytics* and *Metaphysics*, then, Aristotle is clear that there is a sense in which we can know particular contingent truths. However, both T2.6 and T2.7 point to a clear deficiency when it comes to knowing particular contingent truths: that we cannot be sure about the truth of contingent or perishable propositions once the perishable subject is out of our purview. Aristotle's point, then, is not that we cannot be rationally confident in the truth of particular contingent truths, but that we cannot be confident (or so confident) in their truth when the particular subject is out of our purview. This is not the case for universal necessary truths, which permit a greater degree of rational conviction in virtue of the fact that universal necessary truths are stable over time. As such, even when we are not attending to universal necessary truths, our grasp of them will remain stable (all other things being equal). And once we account for this diachronic aspect of rational conviction, we see that universal necessary truths permit a greater degree of rational conviction than contingent truths.

However, in order for the stability of necessary truths to be imparted upon our grasp of them, it is necessary that we grasp them as such. This much is made clear in *Posterior Analytics* 1.33. The chapter opens with the thought that knowledge

---

[69] For discussion see Barnes 1994: 132-134, McKirahan 1992: 128-132, 181-182. See also *APo* 1.6: 74b32-39, 1.31: 87b32-39.

and opinion principally differ in virtue of the fact that knowledge is of what is true and cannot be otherwise, whereas opinion is of what is true or false and can be otherwise (88b30-89a4). Aristotle immediately invokes two appearances in favour of this distinction:

T2.8   And this also agrees with how things appear; for opinion is unstable and of this sort of nature. And in addition to these: no one thinks that they opine when they think that it cannot be otherwise, but they think that they know; rather, when they think that it is thus, but that nothing prevents it from being otherwise, then they think that they opine – thinking that opinion is of this sort of thing, and knowledge is of that which is necessary. (*APo* 1.33: 89a4-10)[70]

καὶ ὁμολογούμενον δ' οὕτω τοῖς φαινομένοις· ἥ τε γὰρ δόξα ἀβέβαιον, καὶ ἡ φύσις ἡ τοιαύτη. πρὸς δὲ τούτοις οὐδεὶς οἴεται δοξάζειν, ὅταν οἴηται ἀδύνατον ἄλλως ἔχειν, ἀλλ' ἐπίστασθαι· ἀλλ' ὅταν εἶναι μὲν οὕτως, οὐ μὴν ἀλλὰ καὶ ἄλλως οὐδὲν κωλύειν, τότε δοξάζειν, ὡς τοῦ μὲν τοιούτου δόξαν οὖσαν, τοῦ δ' ἀναγκαίου ἐπιστήμην.

Picking up on Gorgias' characterisation of opinion as ἀβέβαιος (T2.5) and likely Socrates' claim in the *Meno* that knowledge is μόνιμος (T2.2), Aristotle reports that opinion is apparently unstable. And Aristotle certainly does not have in mind that opinion is unstable because someone with an opinion isn't convinced of what they opine. Indeed, Aristotle is elsewhere clear that conviction accompanies a range of epistemic states, including both knowledge and opinion (*APo* 1.2: 72a25-b4, *DA* 3.3: 428a19-24), and someone who merely has an opinion may be utterly convinced of what they take to be the case, taking themselves to have the most exact knowledge (*EN* 7.3: 1146b24-31). What, then, does Aristotle have in mind? Gail Fine notes that Aristotle might mean either that the objects of opinion are unstable or that an opiner's epistemic state is unstable (Fine 2010b: 330-331). However, the latter is partly a function of the former: the opiner's epistemic state is rendered relatively unstable because the truth value of contingent truths varies over time. In addition, when one takes oneself to opine, one takes the object of one's cognition to be

---

[70] See also *Cat* 8: 8b28, *EN* 1.10: 1100b12-17, *MM* 2.6: 1201b4-10.

contingent. As a consequence, one cannot and should not be sure of its truth when it is beyond one's purview. This, of course, is even true when one has an opinion about a necessary truth. If one thinks that one opines that all triangles have 2R, then one supposes that it could be otherwise that all triangles have 2R (at least on Aristotle's account of the psychology of opinion). As such, one takes the fact that all triangles have 2R to be an unstable truth.[71] Consequently, in order to be maximally rationally convinced, one must not only grasp a necessary truth but grasp it as such.

     I've argued, then, that Aristotle considers knowledge to be of necessary truths in part because such truths are necessary and their truth value is maximally stable. Consequently, our grasp of necessary truth is more stable than that of contingent truth. In virtue of this stability, when we know something that is necessary our grasp of it is similarly stable over time and, in this sense, we are afforded greater conviction in its truth. For this to be true, I've further argued that one must not only know a necessary truth but know it as such. On this view, then, the proper objects of knowledge afford knowledge its stability: necessary truths, at least when they are known *as* necessary truths, afford a degree of conviction that contingent truths cannot.[72] Aristotle thus has grounds for the necessity condition in premise (iv): we only achieve maximal rational conviction when what we know is necessary and we know it as such, such that we ought not take ourselves to know without qualification unless what we know is necessary and we know it as such.

---

[71] For the thought that one can have opinions of necessary facts, see *EN* 3.2: 1111b31-33, *Met* 9.10: 1051b13-18.

[72] Cf. *Republic* 5: 477c. One might object that there are some contingent truths that cannot be otherwise, i.e. past occurrences (*DI* 9, *EN* 6.3: 1139b5-11). For example, the truth value of "Socrates was sitting" will not change. Nonetheless, I take it that Aristotle would still maintain that we can't be maximally rationally convinced about such truths, because we cannot now observe them, e.g. as we can observe current contingent truths or contemplate eternal necessary truths. And our memory is certainly subject to a reasonable level of doubt. In this sense, we cannot know past occurrences with maximal rational conviction.

Premise (iv) also claims that we do not achieve maximal rational conviction unless we know the cause of the necessary truth in question, and know that it is the cause. As we have already seen in the *Meno*, Plato apparently associates having an account of the reason why with rational conviction and the stability of knowledge (T2.2). Aristotle suggests something similar in *Posterior Analytics* 1.24 by appeal to an everyday type of knowledge:

T2.9   Again, we seek the reason why as far as this, and we think that we know at the time when it is not the case that this either comes to be or is because of something else; for, in this way the last thing is already an end and a limit. For example, for the sake of what did he come? In order to get the money, and this in order to give back what he owed, and this in order not to act unjustly; and going on in this way, when it is no longer because of something else and there is no other "for the sake of which", we say that it is because of this as an end that they came (and is and came to be), and at that time we say that we know most of all why they came. Thus, if it is similarly the case concerning all causes and reasons why, [and] concerning causes in terms of "that for the sake of which" we know most in this way, therefore in the other cases we will [also] know most whenever this no longer holds because of something else. And so, when we know that the external angles are equal to four right angles because it is isosceles, it still remains to ask why isosceles [is so] – because it is a triangle, and this because it is a rectilinear figure. But if this no longer because of something else, at this time we know most. And at this time it is also universal; hence universal demonstrations are best. (*APo* 1.24: 85b27-86a2)

Ἔτι μέχρι τούτου ζητοῦμεν τὸ διὰ τί, καὶ τότε οἰόμεθα εἰδέναι, ὅταν μὴ ᾖ ὅτι τι ἄλλο τοῦτο ἢ γινόμενον ἢ ὄν· τέλος γὰρ καὶ πέρας τὸ ἔσχατον ἤδη οὕτως ἐστίν. οἷον τίνος ἕνεκα ἦλθεν; ὅπως λάβῃ τἀργύριον, τοῦτο δ' ὅπως ἀποδῷ ὃ ὤφειλε, τοῦτο δ' ὅπως μὴ ἀδικήσῃ· καὶ οὕτως ἰόντες, ὅταν μηκέτι δι' ἄλλο μηδ' ἄλλου ἕνεκα, διὰ τοῦτο ὡς τέλος φαμὲν ἐλθεῖν καὶ εἶναι καὶ γίνεσθαι, καὶ τότε εἰδέναι μάλιστα διὰ τί ἦλθεν. εἰ δὴ ὁμοίως ἔχει ἐπὶ πασῶν τῶν αἰτιῶν καὶ τῶν διὰ τί, ἐπὶ δὲ τῶν ὅσα αἴτια οὕτως ὡς οὗ ἕνεκα οὕτως ἴσμεν μάλιστα, καὶ ἐπὶ τῶν ἄλλων ἄρα τότε μάλιστα ἴσμεν, ὅταν μηκέτι ὑπάρχῃ τοῦτο ὅτι ἄλλο. ὅταν μὲν οὖν γινώσκωμεν ὅτι τέτταρσιν αἱ ἔξω ἴσαι ὅτι ἰσοσκελές, ἔτι λείπεται διὰ τί τὸ ἰσοσκελές – ὅτι τρίγωνον, καὶ τοῦτο, ὅτι σχῆμα εὐθύγραμμον. εἰ δὲ τοῦτο μηκέτι διότι ἄλλο, τότε μάλιστα ἴσμεν. καὶ καθόλου δὲ τότε· ἡ καθόλου ἄρα βελτίων.

Aristotle offers an observation about our everyday explanatory practices of peoples' actions. When we want to know why someone did something, we continue to look for the ultimate reason for their action. At each stage of our inquiry there is something more to know: they came (say, to the market) in order to get money, and they collected the money in order to repay a debt, and they ultimately did this in order to act justly. It is only when we reach the ultimate explanation that we know why they came to the market most of all, because there is no further explanation to know. Indeed, Aristotle even suggests that we not only know most when we know the ultimate explanation, but only at this time do we take ourselves to know (τότε οἰόμεθα εἰδέναι, 85b27-29).[73] Implicit, then, is the thought that we do not take ourselves to know until we know most, and we do not take ourselves to know something most until we have discovered its ultimate explanation.

Given this, we might suppose that Aristotle draws on Plato's thought in the *Meno* that knowledge is stable because it is tethered by an account of the reason why: when we know something, we know its cause; when we know its cause, we are rationally convinced of what we take to be true; and only when we know its ultimate cause are we maximally rationally convinced of what we take to be true. To this, however, it could well be objected that one need not know why the person came to the market in order to be maximally rationally convinced that they came to the market, nor need we know the ultimate explanation of why they came to the market. We can be maximally rationally convinced of the fact that they came to the market simply in virtue of observing that they came to the market.

Aristotle's case is strengthened by his final example of knowing 'that the external angles are equal to four right angles [4R] because it is isosceles'. One might suppose that, similarly to the market case, we can be maximally rationally convinced that the figure has 4R simply in virtue of observing the figure and measuring its angles (if indeed Aristotle has a perceptible, individual figure in

---

[73] See also *Phys* 1.1: 184a12-14.

mind).[74] Alternatively, we can be maximally rationally convinced that the figure has 4R because it is an isosceles triangle, simply in virtue of knowing that that 4R necessarily belongs to all isosceles triangles. However, Aristotle has grounds to claim that we cannot be maximally rationally convinced in either case until we know the ultimate explanation, i.e. that 4R belongs to the figure (i.e. the isosceles triangle) *qua* figure. I make an initial case for this interpretation in the next section through a consideration of Aristotle's distinction between knowing without qualification and knowing in the sophistic way according to accident (§2.3.2.1). The sophistic way of knowing parallels the epistemic deficiency of the person who merely knows that 4R belongs to the figure because it is an isosceles triangle in T2.9. On the basis of this, I argue that Aristotle has grounds to claim that we are not maximally rationally convinced that 4R belongs until we know its ultimate explanation (§2.3.2.2). As such, we are not maximally convinced of necessary truths until we grasp the ultimate explanation and hence the very reason why what we take to be true could not be otherwise.

2.3.2.1. *Knowing in the sophistic way according to accident*

In T1.1, Aristotle juxtaposes knowing without qualification and knowing in the sophistic way according to accident (τὸν σοφιστικὸν τρόπον τὸν κατὰ συμβεβηκός, 71b9-10). There Aristotle claims that to know without qualification is to have causal knowledge of what cannot be otherwise. At first blush, then, we might suppose that we fail to know without qualification and thus know in the sophistic way, when we fail to know something that cannot be otherwise and/or fail to know its cause. But as we shall see, this is not right. Under Aristotle's description, the sophistic knower knows necessary truths and can plausibly know them as such. In addition, there is an attenuated sense in which the sophistic knower grasps explanations of necessary truths. What they fail to grasp, however, is the very thing

---

[74] In what follows, I suppose that Aristotle is talking about a perceptible, individual figure (i.e. a perceptible isosceles triangle). It may well be the case that Aristotle instead has in mind the species, "isosceles triangle". Either will do for my current purposes.

that makes what is known what it is, i.e. the ultimate, essentialist cause for why something is the way it is and, as a consequence, why it could not be other than it is.[75] As a consequence, the sophistic knower fails to achieve maximal rational conviction in what they know.

To see this, it's first worth pausing over Aristotle's only other reference to the sophistic way of knowing in the *Posterior Analytics*:[76]

T2.10 For this reason, even if someone were to prove of each triangle, either by one or by different [proofs], that each has two right angles – separately of the equilateral and the scalene and the isosceles – they would not yet know of the triangle that it has two right angles, except in the sophistic way; nor do they know it of a triangle universally,[77] not even if there is no other triangle apart from these. For they do not know it as triangle, nor even of every triangle, except in number; [they do] not [know it] of every triangle as a form, even if there is nothing of which they do not know it. So when do they not know universally, and when do they know unconditionally? Clearly, then, [they know unconditionally] if it were the same thing to be a triangle and to be an equilateral, either for each or for all. But if it is not the same but different, and if something holds of them as triangles, then they do not know. (*APo* 1.5: 74a25-35)

διὰ τοῦτο οὐδ' ἄν τις δείξῃ καθ' ἕκαστον τὸ τρίγωνον ἀποδείξει ἢ μιᾷ ἢ ἑτέρᾳ ὅτι δύο ὀρθὰς ἔχει ἕκαστον, τὸ ἰσόπλευρον χωρὶς καὶ τὸ σκαληνὲς καὶ τὸ ἰσοσκελές, οὔπω οἶδε τὸ τρίγωνον ὅτι δύο ὀρθαῖς, εἰ μὴ τὸν

---

[75] Here I am in agreement with and heavily indebted to Lucas Angioni's arguments (Angioni 2014, 2016). Philoponus proposes an alternative interpretation of the sophistic way of knowing, according to which the sophistic knower knows by means of a fallacy of accident (*Posterior Analytics*: 21.15-28, cf. Ross 1949: 508-509). I don't explore this option, though see n. 84 below. As I understand it, one can know in the sophistic way in different ways. In addition to the example considered below, one might know in the sophistic way that thunder exists if the only thing that one knows about thunder is that it causes fear. In so doing, one knows according to accident that thunder exists because one fails to grasp an essential and/or demonstrable attribute of thunder (*APo* 2.10: 93b32 *ff.*). What unites different cases of the sophistic way of knowing is that each is, in some sense or other, an accidental mode of knowing.

[76] Aristotle also remarks on a sophistic characterization of what knowledge is in *Posterior Analytics* 1.6. I tend to this in Chapter 3.

[77] Reading καθόλου τριγώνου (with Barnes 1994 and most mss.) for the OCT's καθ' ὅλου τριγώνου.

σοφιστικὸν τρόπον, οὐδὲ καθόλου τριγώνου, οὐδ' εἰ μηδὲν ἔστι παρὰ ταῦτα τρίγωνον ἕτερον. οὐ γὰρ ᾗ τρίγωνον οἶδεν, οὐδὲ πᾶν τρίγωνον, ἀλλ' ἢ κατ' ἀριθμόν· κατ' εἶδος δ' οὐ πᾶν, καὶ εἰ μηδὲν ἔστιν ὃ οὐκ οἶδεν. Πότ' οὖν οὐκ οἶδε καθόλου, καὶ πότ' οἶδεν ἁπλῶς; δῆλον δὴ ὅτι εἰ ταὐτὸν ἦν τριγώνῳ εἶναι καὶ ἰσοπλεύρῳ ἢ ἑκάστῳ ἢ πᾶσιν. εἰ δὲ μὴ ταὐτὸν ἀλλ' ἕτερον, ὑπάρχει δ' ᾗ τρίγωνον, οὐκ οἶδεν.

One fails to know in the sophistic way that "2R belongs to triangle", when one knows it but not as it belongs. Following Aristotle's example, we can imagine that the sophistic knower has constructed a proof along the following lines:

Proof 1

(1) 2R belongs to all closed, three-sided, rectilinear plane figures with two equal sides;

(2) Closed, three-sided, rectilinear plane figure with two equal sides belongs to all isosceles triangles;

(3) Therefore: 2R belongs to all isosceles triangles.[78]

Aristotle supposes that the without qualification knower then proves exhaustively, for every type of triangle, that each has 2R 'either by one or by different proofs'. The sophistic knower could, for instance, repurpose Proof 1 to generate two further

---

[78] In the following I use the terminology of Aristotle's syllogistic, particularly Barbara syllogisms (*APr* 1.4: 25b32 *ff.*):

AaB	A belongs to all B
BaC	B belongs to all C
AaC	A belongs to all C

A is the major term, C is the minor term, and B is the middle term. In the majority of my examples, A is an attribute (e.g. having interior angles equal to two right angles), C is the subject (e.g. triangle) to which A belongs, and B is the term that is intended to explain why A belongs to C (e.g. being a closed, three-sided, rectilinear, plane figure). Throughout "belongs" translates ὑπάρχειν and "predicate" translates ἐνυπάρχειν. In the case of *demonstrative* syllogisms in Barbara, the middle term (B) will typically be related essentially to either the attribute/major term (A) or the subject/minor term (C) (Angioni 2014: 103-109).

proofs for scalene triangle and equilateral triangle, concluding that "2R belongs to all scalene triangles" and "2R belongs to all equilateral triangles", respectively. We can then imagine their next steps:

Proof 2

(1) 2R belongs to all isosceles triangles;

(2) 2R belongs to all scalene triangles;

(3) 2R belongs to all equilateral triangles;

(4) All triangles are either isosceles triangles, scalene triangles, or equilateral triangles;

(5) Therefore: 2R belongs to all triangles.

But Aristotle claims that even if the sophistic knower has proven for every type of triangle that each has 2R, they would not yet know without qualification that 2R belongs to triangle, nor would they know it universally. Rather, they would know it in the sophistic way. The reason, he says, is that the sophistic knower does not yet know that 2R belongs to triangle *as* triangle. Rather, they've proved it for each type of triangle and then stitched the proofs together, such that they merely know it of every triangle in number (κατ' ἀριθμόν). This falls short of knowing that 2R belongs universally to every triangle, because universal belongings involve more than belonging to every case:

T2.11   And by universal I mean that which belongs both of every case and in itself, i.e. as such. […] But in itself and as such are the same, e.g. point and straight belong to line in itself (for also [they belong] as line) (*APo* 1.4: 73b26-30)

καθόλου δὲ λέγω ὃ ἂν κατὰ παντός τε ὑπάρχῃ καὶ καθ' αὑτὸ καὶ ᾗ αὑτό. […] τὸ καθ' αὑτὸ δὲ καὶ ᾗ αὑτὸ ταὐτόν, οἷον καθ' αὑτὴν τῇ γραμμῇ ὑπάρχει στιγμὴ καὶ τὸ εὐθύ (καὶ γὰρ ᾗ γραμμή)

In T2.10, then, the sophistic knower fails to know without qualification because they fail to know universally, and they fail to know universally because they fail to know

that 2R belongs to triangle *as such* (i.e. *qua* triangle). To grasp this, one would need a different proof:

    Proof 3

  i.   2R belongs to all closed, three-sided, rectilinear, plane figures;

  ii.   Closed, three-sided, rectilinear, plane figure belongs to all triangles;

  iii.   So: 2R belongs to all triangles.

The main difference between Proofs 1 and 3 is that Proof 1 employs extraneous information in its middle term to explain why 2R belongs to isosceles triangle. Whilst it's true that isosceles triangles have two equal sides, the fact that they have two equal sides is of no consequence to the fact that they have 2R. And this leads to Proof 2 being in some sense deceptive: it is not the case that 2R belongs to all triangles *because* (i) all triangles are either isosceles, scalene, or equilateral and (ii) 2R belongs to all of these types of triangle. Rather, 2R belongs to triangle because of the essential nature of triangles as closed, three-sided, rectilinear, plane figures (as Proof 3 purports). Consequently, Proof 2 gets the explanation wrong and thus fails to show that 2R belongs to triangle *as* triangle, i.e. in virtue of the essential nature of triangles.

    This is further confirmed by a consideration of Aristotle's broader project in *Posterior Analytics* 1.5, in which he sets out to describe different ways in which it escapes our notice that we have failed to prove something universally and primitively, even though it seems to us that we have done so successfully (74a4-6). T2.10 is one example of this. Under such circumstances, we might mistakenly take ourselves to know without qualification. And that the proof by means of which we know proves that an attribute belongs primitively to its subject is a further condition that Aristotle adds to the account of universal belonging in T2.11:[79]

T2.12 Something belongs universally at the time when it is proved of any chance case, and of what is primitive. (*APo* 1.4: 73b26-27)

---

[79] *Pace* Barnes 1994: 119-120.

τὸ καθόλου δὲ ὑπάρχει τότε, ὅταν ἐπὶ τοῦ τυχόντος καὶ πρώτου δείκνυται.

Aristotle gives two examples. First, 2R does not belong universally to rectilinear figure, because you cannot prove of any chance rectilinear figure that 2R belongs to it. This is because 2R belongs only to some rectilinear figures (i.e. triangles and not, e.g., quadrilaterals) (73b33-37). Proving of any chance case thus amounts to proving that the attribute (2R) belongs to every case of its subject (i.e. triangle).[80] Second, 2R does not belong universally to isosceles triangle because it does not belong primitively to isosceles triangle (73b38-39). Aristotle elsewhere asks us to imagine that we take away the differentia "isosceles" from "isosceles triangle". We would be left with the genus "triangle" to which 2R would still belong, i.e. 2R still belongs of every case when we move from species to genus. However, if we were to also take away the differentia "triangle" we would be left with the genus "rectilinear figure", to which 2R does not belong to every case. The final species that 2R belongs to of every case, is the species to which 2R belongs primitively.

We can apply T2.12 to the sophistic knower's proofs as follows: by means of Proofs 1 and 2, the sophistic knower fails to know that 2R belongs to triangle without qualification but succeeds to know in the sophistic way, according to accident. The sophistic knower fails to know without qualification because they fail to know universally, and they fail to know universally because they fail to know both that 2R belongs to every case of triangle and to triangle as such, i.e. in virtue of the essential nature of triangles. For this, it is necessary to know that 2R belongs both to any chance case of triangle and that it belongs to triangle primitively. Proofs 1 and 2 imply that 2R belongs primitively to the three species of triangle. Consequently, they falsely imply that 2R belongs to triangle because of the nature of its species, rather than the other way around. Proofs 1 and 2 thus fail to convey the fact that 2R belongs primitively to triangles.

---

[80] Cf. *APo* 1.4: 74a28-33. On the equivocation of "of every case" and "of any chance case", see McKirahan 1992: 97.

Notably, however, Proof 2 succeeds in meeting the criteria of universality and primitiveness, if these criteria are understood extensionally. This is because Proof 2 validly proved that 2R belongs to triangle and it is in fact the case that 2R belongs to triangle universally and primitively, i.e. it is in fact the case that 2R belongs to any chance case of triangle and does not belong to triangle's genus (i.e. rectilinear figure). As such, T2.10 must add the further requirement that, in order to know without qualification that 2R belongs to triangle, the knower must know this by means of a proof that has an intensional grasp of the fact that 2R belongs universally and primitively to triangle.[81] And this is precisely what Proof 3 offers: it explains that 2R belongs universally to triangle (i.e. it belongs of any chance case and primitively of triangle) because it makes clear that the essential nature of triangles uniquely determines the fact that 2R belongs to triangle *as* triangle (and, similarly, to the species of triangles *as* triangle). And the essential nature of triangles uniquely determines this because (i) the addition of "two equal sides" (in the case of isosceles triangle) adds nothing to the explanation of why 2R belongs to isosceles triangle, and (ii) "closed, rectilinear, figure" does insufficient causal work (with respect to the fact that 2R belongs to triangle) unless the addition of "three-sided" is also made. T2.10 thus makes clear that to know without qualification requires that one knows the very reason why an attribute belongs universally to its subject, i.e. in virtue of the essential nature of the subject, and knows it as such.[82]

We can readily apply this to Aristotle's claim in T2.9 that we know something most when (and perhaps don't take ourselves to know something until) we know its ultimate explanation. Aristotle's example of the person who goes to the market to collect money suggests that if we don't know the ultimate explanation (i.e. that they went to the market place in order not to act unjustly) then there's more for us to know. We might then similarly suppose in the case of the figure that has 4R that, if we merely know that 4R belongs to the figure because it is an isosceles triangle, there's simply more for us to know, i.e. that 4R ultimately belongs to the figure because it is a rectilinear figure. However, Aristotle's analysis of the

---

[81] See also Lennox 1987: 91-92, Hasper 2006: 273-278, Ferejohn 2013, 81-95.

[82] For similar interpretations of the sophistic way of knowing, see Angioni 2014, 2016.

sophistic knower in T2.10 suggests more than this. The person who knows that 4R belongs to the figure because it is an isosceles triangle has not yet determined the very reason why 4R belongs to the figure, i.e. because it is a rectilinear figure and in virtue of the essential nature of rectilinear figures. As such, it's not merely that this person lacks further explanatory information as to why 4R belongs to the figure (the sense in which they fail to know most is not merely quantitative); it's also the case that they've failed to isolate the very reason why 4R belongs to the figure, i.e. because of the nature of rectilinear figures. They thus fail to know most in a qualitative sense: they have failed to grasp the very reason why 4R belongs to the figure and thus its proper explanation.[83]

Note, however, that both the sophistic way of knowing and the knowledge that 4R belongs to the figure because it is an isosceles triangle are demanding epistemic states. Consider again Proofs 1 and 2, the premises of which are all necessary truths and the deductive reasoning of which is logically necessary.[84] As such, knowing in the sophistic way entails neither that what you know is a

---

[83] We might imagine that the same is true in the case of the market place example. If we suppose that the person went to the market place (ultimately) to collect money, then we have a very different grasp of the person and their intentions than if we know that they went to the market place (to collect money, etc.) in order not to act justly.

[84] In addition, Proof 1 employs premises that are all in itself predications, at least in the sense of demonstrable in itself accidents (*APo* 1.7: 75b1, 1.33: 83b19-20, cf. 1.4: 73a34-b5, *Met* 5.30). 2R is an in itself accident of isosceles triangle because it is implicit in the account of isosceles triangle and, as such, a demonstrable attribute of isosceles triangle (just as 2R belongs to triangle as an in itself accident. For discussion see Lennox 1987: 90-97, McKirahan 1992: 98-102, 177-187, Angioni 2016: 94-95.) This is not true of Proof 2, premise (4) of which ("all triangles are either isosceles, scalene, or equilateral") is a necessary truth but not an itself predication. Converting it to an in itself predication would render Proof 2 a fallacy of accident (*SE* 6: 168a40-b6):

(1) 2R belongs to all isosceles triangles;

(2) 2R belongs to all scalene triangles;

(3) 2R belongs to all equilateral triangles;

(4) Isosceles triangle belongs to triangle *and* scalene triangle belongs to triangle *and* equilateral triangle belongs to triangle;

(5) Therefore: 2R belongs to all triangles.

contingent truth nor that you know it in virtue of either contingent truths or by fallacious reasoning. What's more, the sophistic knower still grasps a quasi-explanation of why 2R belongs to triangles (Proof 2) and grasps an explanation (albeit not the cause) of why 2R belongs to isosceles triangle (Proof 1) – just as the person who knows that 4R belongs to the figure because it is an isosceles triangle has grasped an explanation, if not the ultimate cause. What unites these cases, however, is that the knower fails to grasp the very reason why an attribute belongs to its subject, i.e. in virtue of the essential nature of the subject, and thus its proper causal explanation.[85]

2.3.2.2. Rational conviction and ultimate explanations

According to this interpretation of the sophistic way of knowing, the sophistic knower fails to know without qualification because they fail to grasp the ultimate cause that uniquely determines and properly explains why an attribute belongs to its subject. For example, the sophistic knower fails to know without qualification that 2R belongs to all triangles because they fail to grasp that it is true in virtue of the essential nature of triangles. Similarly, the 4R-knower fails to know without qualification that 4R belongs to the figure because they fail to grasp that 4R belongs to the figure in virtue of the essential nature of rectilinear figures. But how does this

---

[85] This thought is captured well by Aristotle's third sense of in itself, according to which: x is in itself y, if it's not the case that x is y in virtue of being something else (*APo* 1.4: 73b5-10. For discussion, see McKirahan 1992: 94, Barnes 1994: 114-118, Peramatzis 2010: 159, Angioni 2016: 95 *ff.*). For example, 2R belongs in itself to triangle because 2R belongs to triangle *as* triangle, and not in virtue of something else. However, 2R does not belong in itself to isosceles triangle because 2R belongs to isosceles triangle in virtue of something else, i.e. triangle. Similarly, 4R does not belong in itself to isosceles triangle because 4R belongs to isosceles triangle in virtue of something else, i.e. rectilinear figure. See also *Posterior Analytics* 1.24: 85a21-31, where Aristotle argues that we know each thing better when we know it in itself and not in virtue of something else. From this he argues that universal demonstrations are best because universal demonstrations ensure that we know something in virtue of itself (85b4-15). Aristotle similarly offers the example of the fact that 2R belongs to isosceles triangle. We know this best when we know it in virtue of the fact that 2R belongs to isosceles triangle *as* triangle, and not in virtue of something else.

help Aristotle push home the thought that we cannot be maximally rationally convinced of something unless we grasp its cause? Aristotle's answer, in short, is that one does not have maximal rational conviction that something is the case until one has grasped its ultimate explanation. Until then, one does not grasp with maximal rational conviction that it could not be otherwise, because they do not yet know the proper explanation as to why it could not be otherwise.

Imagine the sophistic knower who knows that 2R belongs to all triangles in virtue of Proof 2 in a dialectical context. Suppose that an interlocutor was to challenge the conclusion that 2R belongs to all triangles by denying that premise (4) is an exhaustive list of the species of triangle. In this situation, the sophistic knower may come to doubt the conclusion that 2R belongs to all triangles. Alternatively, the sophistic knower may fall foul of refutation by fallacy of accident (*SE* 6: 168a40-b4):

> "Do all triangles have 2R?"
> "Yes"
> "Are all triangles figures?"
> "Yes"
> "So, do all figures have 2R?"
> "Yes"
> "Do squares have 2R?"
> "No"
> "Are squares figures?"
> "Yes"
> "So, do all figures have 2R?"
> "No"
> "But didn't you just agree that all figures have 2R?"
> "…"

This is precisely the scenario in which Aristotle imagines that a knower might be refuted by someone who doesn't know, on account of the former not being able to draw distinctions and spot a fallacious deduction (*ibid.* 168b4-10).[86] However, we can also imagine the sophistic knower succumbing to the same refutation. This is because they don't know that 2R belongs to triangle because of the essential nature of triangles. For all they know (at least by Proof 2), it might be the case that 2R

---

[86] See also *EE* 1.6: 1216b35-a17.

belongs to all triangles *as* figures. This is a possibility that they've yet to rule out. In light of this refutation, they may come to doubt that 2R does in fact belong to all triangles. And we can imagine similar doubts being raised in the case of Proof 1. Someone might query premise (1) by asking what being a three-sided rectilinear plane figure *with two equal sides* has to do with having 2R. In light of this, the sophistic knower might come to abandon premise (1) and thus doubt the conclusion that 2R belongs to all isosceles triangles and the eventual conclusion of Proof 2: that 2R belongs to all triangles. In this case, the sophistic knower would not be able to answer the query precisely because premise (1) employs extraneous information: having two equal sides has nothing to do with having 2R. As such, there is a sense in which the sophistic knower's knowledge can be subjected to rational doubt.

Notably, the person who knows without qualification by means of Proof 3 is not subject to the same uncertainty: their demonstration does not depend on the thought that scalene, isosceles, and equilateral is an exhaustive list of the types of triangle; they can explain why 2R doesn't belong to all figures: because 2R belongs to all and only to *three-sided*, *closed*, *rectilinear*, figures; and their knowledge doesn't erroneously imply that the differentiae of each species of triangle is causally relevant to their having 2R. Admittedly, the without qualification knower may also fall foul of the imagined refutation by fallacy of accident in virtue of not knowing how to spot and avoid such refutations. Nonetheless, they are able to explain why it's not the case that 2R belongs to all figures, whereas the sophistic knower is not: it's not of the nature of figures to have 2R. And in this scenario, the without qualification knower has grounds for greater rational conviction in the fact that 2R belongs to all triangles, because they understand why it couldn't be otherwise that 2R belongs to all triangles.[87] Their knowledge thus stands on surer footing: the person who knows without qualification has maximal rational confidence because

---

[87] For a similar account of the epistemic deficiency of the sophistic knower and the true opiner see Peramatzis (forthcoming). Peramatzis adds the further concern that the sophistic knower only knows that "triangle" exists according to accident, because they fail to grasp that it exists as a unified kind (cf. *APo* 2.10).

they know *the* cause that makes it the case that it couldn't be otherwise that 2R belongs to all triangles.[88]

In sum, then, I've argued that Aristotle gives us good grounds for premise (iv) in the proposed argument for P1 (§2.3): we only achieve maximal rational conviction when we know necessary truths and know the ultimate cause of those truths, without which we do not know the very reason why it couldn't be otherwise. Necessary truths are the maximally stable set of truths and grasping the ultimate cause of necessary truths ensures that our grasp of them is maximally stable. As such, Aristotle has grounds to claim that when we take ourselves to know ideally, it ought to be that we take ourselves to know something that cannot be otherwise and the ultimate cause that makes it the case that it cannot be otherwise.

2.4. An Aristotelian epistemology?

It is often argued that Aristotle was not (or at least not primarily) concerned with issues of epistemic justification or warrant, neither in respect of sceptical worries about the possibility of knowledge, nor in the sense of explicating the particular epistemic conditions under which mere true belief is transformed into knowledge.[89] Indeed, it is often argued that concerns with epistemic justification and warrant in this sense do not properly arise until the Hellenistic period.[90] Rather, Aristotle was primarily interested in the requirements for explanation and understanding: given that we do know lots of things, what's required to transform our knowledge into

---

[88] This is not to suggest that the without qualification knower would not ever doubt what they know. Rather, they have grounds for maximal rational conviction.

[89] Burnyeat 1981: 108-115, Matthen 1981, 4-10, Aydede 1998, Taylor 1990: 116-117, 15, Angioni 2014: 91, 2016: 82-84, cf. Kosman 1973, Bronstein 2016: 128-129. This is in contrast to interpretations of Aristotle's epistemology according to which Aristotle subscribed to a form of rational foundationalism, according to which our rationalist, non-demonstrative grasp of first principles confers justification upon our grasp of the conclusions of demonstrations. See Frede 1996, Irwin 1977, 1988: chs. 6-7, Ferejohn 2009, Fine 2010a, Goldin 2013.

[90] See Burnyeat 1980: 188, Annas 1990: 184-185, Striker 1990: 143-144, Taylor 1990: 116, Moss & Schwab forthcoming, cf. Brunschwig 1999.

understanding? On this view, Aristotle's theory of demonstrative knowledge in the *Posterior Analytics* is not an account of how we establish that demonstrable propositions are either true or necessarily true. Nor is it that in virtue of which knowledge is secured from sceptical doubt or rendered from mere true belief. Rather, demonstration is a means by which we come to explain and understand such propositions. But it might appear that my interpretation is at odds with this line of thought. In particular, I've argued that when we know without qualification, we are maximally rationally convinced of what we take to be true, and we achieve this when we grasp both that what we know is necessary and why it could not be otherwise. My interpretation might thus be understood to imply that we grasp that certain truths are necessary in virtue of knowing them demonstratively. In this section, I clarify my reading in light of this worry.

In the first case, it's worth making clear what Aristotle himself says about conviction and demonstrative knowledge.[91] Consider, first, *Nicomachean Ethics* 6.3:

T2.13 Therefore, knowledge is a demonstrative state, and [has] the other additional things we specified in the *Analytics*; for, [someone] knows whenever [they] are convinced in a certain way and the principles are known to them; for if [the principles are not] more [known to them] than the conclusion, they will have knowledge [only] according to accident. And so, concerning knowledge, let it be defined in this way. (*EN* 6.3: 1139b31-36)

ἡ μὲν ἄρα ἐπιστήμη ἐστὶν ἕξις ἀποδεικτική, καὶ ὅσα ἄλλα προσδιοριζόμεθα ἐν τοῖς ἀναλυτικοῖς· ὅταν γάρ πως πιστεύῃ καὶ γνώριμοι αὐτῷ ὦσιν αἱ ἀρχαί, ἐπίσταται· εἰ γὰρ μὴ μᾶλλον τοῦ συμπεράσματος, κατὰ συμβεβηκὸς ἕξει τὴν ἐπιστήμην. περὶ μὲν οὖν ἐπιστήμης διωρίσθω τὸν τρόπον τοῦτον.

---

[91] Aristotle uses πίστις to refer both to (i) the psychological state of conviction and (ii) the means by which we might be convinced of something. For example, Aristotle refers to rhetorical proofs as πίστεις (*Rhet* 1354a15, 1355a4-5, for discussion see Dow 2014). I'm predominantly concerned with the former, although I take it that when we are appropriately convinced of something that can be known without qualification, we are convinced on the basis of the explanatory power of the relationship between first principles and demonstrable propositions.

To know demonstratively, one must not merely be convinced of what one knows, but one must also be convinced in a certain way. Aristotle elaborates on this in *Posterior Analytics* 1.2:

T2.14 But since it is necessary both to be convinced of the thing [that one knows] and to know [it] by means of having the sort of deduction which we call a demonstration, and [since] there is this deduction by means of the existence of these items from which [the deduction proceeds], it is not only necessary to already know the primaries, either all or some [of them], but it is also necessary to know them more; for, always, that because of which each thing belongs, belongs more to that other thing, for instance, that on account of which we love [something], is more loved than that thing. The result is that, if indeed we know and are convinced [of something] because of the primaries, we both know and are convinced of them *more*, because it is because of them [i.e., the primaries] that we also [know and are convinced] of the posterior items. […] And the man who is destined to have knowledge through a demonstration must not only know the principles more and be more convinced of them than [he is] of what is being proved, but neither can anything else be more convincing to him, nor can [anything else] be better known [to him] among the opposites of the principles, from which there will be the deduction of the opposite deception, if indeed the man who knows without qualification must be unpersuadable. (*APo* 1.2: 72a25-b4)[92]

Ἐπεὶ δὲ δεῖ πιστεύειν τε καὶ εἰδέναι τὸ πρᾶγμα τῷ τοιοῦτον ἔχειν συλλογισμὸν ὃν καλοῦμεν ἀπόδειξιν, ἔστι δ' οὗτος τῷ ταδὶ εἶναι ἐξ ὧν ὁ συλλογισμός, ἀνάγκη μὴ μόνον προγινώσκειν τὰ πρῶτα, ἢ πάντα ἢ ἔνια, ἀλλὰ καὶ μᾶλλον· αἰεὶ γὰρ δι' ὃ ὑπάρχει ἕκαστον, ἐκείνῳ μᾶλλον ὑπάρχει, οἷον δι' ὃ φιλοῦμεν, ἐκεῖνο φίλον μᾶλλον. ὥστ' εἴπερ ἴσμεν διὰ τὰ πρῶτα καὶ πιστεύομεν, κἀκεῖνα ἴσμεν τε καὶ πιστεύομεν μᾶλλον, ὅτι δι' ἐκεῖνα καὶ τὰ ὕστερα. […] τὸν δὲ μέλλοντα ἕξειν τὴν ἐπιστήμην τὴν δι' ἀποδείξεως οὐ μόνον δεῖ τὰς ἀρχὰς μᾶλλον γνωρίζειν καὶ μᾶλλον

---

[92] See also *APr* 2.16: 64b32-33, *APo* 1.25: 86b2-5, 27-30, 1.26: 87a25-30, *Top* 1.1: 100b18-21. This passage is often taken as evidence that Aristotle is indeed concerned with epistemic justification. Someone who knows without qualification must know and be convinced of the principles of their demonstrations better than the conclusions. Not only this, but the without qualification knower must be unpersuadable and utterly convinced of the first principles. One possible explanation for this is that epistemic justification is conferred from our epistemically certain grasp of first principles to our (perhaps less certain) grasp of demonstrative conclusions. I do not take it as such. For discussion, see Gasser-Wingate unpublished mss.

αὐταῖς πιστεύειν ἢ τῷ δεικνυμένῳ, ἀλλὰ μηδ' ἄλλο αὐτῷ πιστότερον εἶναι μηδὲ γνωριμώτερον τῶν ἀντικειμένων ταῖς ἀρχαῖς ἐξ ὧν ἔσται συλλογισμὸς ὁ τῆς ἐναντίας ἀπάτης, εἴπερ δεῖ τὸν ἐπιστάμενον ἁπλῶς ἀμετάπειστον εἶναι.

In order to know demonstratively, one must be convinced of what one knows, and one must know and be convinced of the conclusions of demonstrations in virtue of the primaries (I take these to include the premises of demonstrations and thus demonstrative first principles). As such, it is necessary to know and be convinced of the first principles of demonstrations better than the demonstrative conclusions.[93] Indeed, Aristotle even claims that someone who knows demonstratively must be unpersuadable with respect to first principles.

As Marc Gasser-Wingate points out, Aristotle is elsewhere explicit about the sense in which the person who knows without qualification is unpersuadable with respect to the first principles (Gasser-Wingate unpublished mss). Aristotle's only other descriptions of the knower's unpersuadibility occur in the *Topics*, where in all but one case Aristotle makes clear that the knower is unpersuadable by argument (ὑπὸ λόγου).[94] As such, the knower (or perhaps someone who takes themselves to know) might be persuaded out of their principles by other means, e.g. in light of new perceptual evidence or experiential phenomena. Indeed, Aristotle is elsewhere clear that principles ought to be judged on the basis of what follows from them, e.g. as to whether they are explanatory of the phenomena.[95] The sense, then, in which the without qualification knower is unpersuadable with respect to their first principles is that the first principles have maximal explanatory power over the known phenomena.

This interpretation is further suggested by the fact that, Aristotle's claim that first principles must be more convincing and better known than the conclusion of demonstrations, echoes his distinction between that which is better known to us

---

[93] On Aristotle's general principle that if *x* belongs to *y* because of *z*, then *x* belongs more to *z* than it does to *y*, see Lloyd 1976, Barnes 1994: 101-102. Cf. Goldin 2013: 207 *ff.*

[94] *Top* 5.2: 130b16, 5.4: 133b29 *ff.*, 134a2 *ff.*, 5.5: 134a36 *ff.*, 134b17, cf. 5.8: 146b2.

[95] *DC* 3.7: 306a11-17, *GC* 1.2: 316a5-10, *DA* 2.2: 413a11-16, *GA* 3.10: 760b27-33, *MA* 1: 698a11-14, *EE* 1.6: 1217a11-14.

and better known by nature (*APo* 1.2: 71b33-72a5). As previously argued, this is predominantly a distinction between that which is explanatorily prior and posterior (§1.5.1). If we are meant to imagine that the demonstrative knower's conviction flows from first principles to demonstrative conclusions in a manner that tracks the causal-explanatory priority of first principles over demonstrative conclusions, then we might imagine that the demonstrative knower's conviction is a function of the explanatory power of first principles – they are convinced of the conclusions 'because of the primaries' (διὰ τὰ πρῶτα) in virtue of the fact the primaries cause and explain the known conclusions. As such, we are most convinced of the first principles because only those principles 'among the opposites of the principles' are able to explain the demonstrable conclusions. What T2.14 requires, then, is that we comes to reverse the flow of our conviction, such that (i) we are more convinced of first principles (i.e. that which is prior, better known, and more convincing *by nature*, e.g. that which is universal) than the conclusions of demonstrations (i.e. that which is prior, better known, and more convincing *to us* as novice learners, e.g. that which is closer to perception), (ii) we are more convinced of the first principles because they are the cause of and thus explain the demonstrative conclusions, and (iii) we are maximally rationally convinced of demonstrative conclusions in virtue of the fact that they are uniquely and determinatively explained by the first principles, e.g. given the essential nature of triangles it could not be otherwise that 2R belongs to all triangles. And, in each case, the sense in which one must be convinced is *qua* λόγος, i.e. in respect of the explanatory relationships one takes to hold between what one knows, i.e. between first principles and demonstrative conclusions.

As argued, this is precisely what the without qualification knower achieves: they isolate the ultimate and uniquely determining cause as to why an attribute belongs to its subject. Similarly, this is precisely the sense in which the sophistic knower is epistemically deficient: they have failed to know by means of first principles that isolate the very reason why an attribute belongs to its subject, and so they lack maximal rational conviction in both their principles and in the conclusion of their proofs (at least with respect to their account of the relationship that holds

between them). As a consequence, they are more likely to be the victim of rational refutation. However, this is not to claim that demonstrations are necessary to establish either the truth or the necessary truth of demonstrative conclusions. The sophistic knower knows that 2R belongs to all triangles by means of Proof 2. Not only have they established the truth of this demonstrable conclusion, but they have plausibly also established that it is necessarily true. Indeed, the sophistic knower may also know that 2R belongs to all triangles on the basis of experience and induction – they need not be worse off in respect of perceptual and experiential conviction in what they know. As such, both the sophistic knower and the without qualification knower know (in some sense) that 2R belongs to all triangles and that this is necessarily true. What the sophistic knower lacks, however, is maximal rational conviction because they are subject (to a greater degree) to the possibility of rational refutation. As such, the sophistic knower might come to doubt their knowledge that 2R belongs to all triangles in the face of argument and refutation (e.g. in the context of dialectical refutation), even to the extent that they might abandon their belief in this proposition, or at least be left unsure about its truth – in spite of their knowledge and experience of particulars. On this view, demonstrative knowledge is not necessary to establish either the truth or necessary truth of a proposition. Rather, it is the means by which to ensure one has maximal rational conviction in one's knowledge *qua* rational account (λόγος), such that one's knowledge is maximally steadfast in all respects (i.e. including with respect to argument and refutation). As such, without qualification knowledge provides the greatest rational conviction that one could have in respect of what one knows, but it is not necessary either to know (in some sense) or establish its truth or necessity.[96]

---

[96] This, it seems to me, highlights the fact that Aristotle is not solely concerned with the requirements for knowing single propositional truths. Indeed, as knowers we do not know things in isolation, and the conviction we have in what we know frequently depends in part on its relation to other things that we know. The without qualification knower thus has greater rational confidence that 2R belongs to all triangles because, in addition to knowing this inductively, they have isolated the very reason why it could not be otherwise that 2R belongs to all triangles: they grasp the proper grounds for its necessity.

My account sits between extreme rationalist and extreme empiricist readings of Aristotle's account of demonstrative knowledge. According to the extreme rationalist, one cannot know the conclusions of demonstrations unless one knows them demonstratively. On this view, demonstrations provide the proper (i.e. rational) justificatory grounds for the conclusions of demonstrations.[97] According to the extreme empiricist, one can very well know the conclusions of demonstrations (e.g. by means of experience and induction) without demonstrating them. Instead, demonstration transforms what one knows into understanding, by providing the proper causal explanation. On my view, it is indeed possible to know the conclusions of demonstrations without demonstrative knowledge (this is my empiricist sentiment), and it is indeed to possible to know that they are necessary. But it's not possible to have maximal rational conviction in the conclusion of demonstrations unless one also possesses (i.e. in addition to experience and induction) a demonstration that provides the very reason why the demonstrative conclusion could not be otherwise (my rationalist sentiment). This is not to say that one cannot know the conclusions of demonstrations without demonstrative knowledge; but that one will not know them without qualification (i.e. superlatively, ideally) without demonstrative knowledge. Consequently, Aristotle's views about conviction and explanation converge: we gain maximal rational conviction in virtue of grasping causal explanations that explain why the object of our knowledge could not be other than it is. In this sense, the without qualification knower knows the objects of demonstration best.

2.5. Conclusion

In this chapter, I have argued that Aristotle has the resources to argue that when we take ourselves to know ideally, we take ourselves to be maximally rationally convinced, and that we ought not take ourselves to be maximally rationally convinced unless we've grasped a necessary truth and the ultimate causal-explanation as to why it cannot be otherwise. This puts Aristotle's argument in T1.1

---

[97] See n.89.

on firmer ground. Starting from a common idea about knowledge, Aristotle can argue that we know without qualification only if we have causal knowledge of necessities. However, Aristotle's epistemic ideal is more demanding than this: it is not merely the superlative epistemic state, but a superlative epistemic state that we have reason to strive for (§1.6). But why ought we strive for causal knowledge of necessities? I raise this challenge in the next chapter through a consideration of the sophistic knower's account of the nature and value of knowledge.

3. The sophistic challenge to the value of knowing without qualification

3.1. Introduction

So far, I've argued that we should interpret Aristotle's account of without qualification knowledge in T1.1 as an epistemic ideal (Chapter 1). I've also argued that Aristotle has good grounds to claim that we only achieve this ideal when we know superlatively, and we know superlatively only when we achieve causal knowledge of necessities (Chapter 2). However, I've also argued that Aristotle's epistemic ideal is prescriptive: without qualification knowledge is not merely the superlative epistemic state, but one that we ought to strive for. But the mere fact that causal knowledge of necessities is the superlative epistemic state may provide us with no reason to strive for it. Consider the following examples: I know Kantian ethics well enough to teach an A-level student but not to write a good academic paper. And I know why sound travels faster in water than in air sufficiently for passing a high school science exam, but not for an undergraduate physics degree. In both cases it's true that I could be more knowing, but I may nonetheless maintain that I have no reason to be more knowing. Similarly, the claim that we are most knowing when we achieve causal knowledge of necessities is insufficient for the further claim that we ought to strive for causal knowledge of necessities. Reason must be given.[98]

In this chapter, I explore a challenge of this sort through Aristotle's choice to juxtapose knowing without qualification with the sophistic way of knowing in T1.1. The chapter proceeds in two parts. In §3.2, I argue that the sophist and the sophistic way of knowing are representative of a substantive thesis about the value of knowledge: that the sole value of any and all knowledge (or epistemic state) is instrumental upon the value of making money through the appearance of wisdom. The sophistic knower thus presents a challenge to Aristotle's epistemic ideal: given that knowing in the sophistic way according to accident is typically sufficient for making money through the appearance of wisdom, we may have no reason to strive

---

[98] See also §1.6.

to know without qualification. I also argue that the sophist's account of the value of knowledge is in harmony with their account of the nature of knowledge: that to know is to have knowledge (τὸ ἐπίστασθαι τὸ ἐπιστήμην ἔχειν, *APo* 1.6: 74b23-24). Aristotle does not contend that this characterisation of knowledge is false, but rather that it does not specify the sense in which knowledge is something we have. In §3.3, I argue that Aristotle's considered view is that knowledge is_def a demonstrative state (ἕξις ἀποδεικτική, *EN* 6.3: 1139b31-32), such that knowledge is not something that we have (e.g.) in the sense of a possession, but as a state of the soul. To this end, I argue that T1.1 is not Aristotle's definition of knowledge, but a preliminary account from which to inquire into the essential nature of knowledge. I propose that this provides Aristotle with the framework within which to meet the sophistic knower's challenge and explain the proper value of knowledge: knowledge is valuable because it is a state of the soul and, in particular, a virtuous state of the soul. In Part II (Chapters 4-7) of this thesis, I offer an account of the proper value of knowledge as a virtue of thought.

3.2. The sophistic account of the nature and value of knowledge

In Chapter 2, I argued that the sophistic knower described in *Posterior Analytics* 1.5 knows according to accident because they fail to grasp the very reason why an attribute belongs to its subject, e.g. they fail to know that 2R belongs to all triangles because of the essential nature of triangles. In so doing, they fail to know without qualification because they fail to know with maximal rational conviction that the object of their knowledge could not be otherwise. Lucas Angioni argues similarly that to know according to accident is to fail to grasp 'the most appropriate cause as middle term', which 'captures the exact feature that makes the explanandum what it is' (Angioni 2016: 102). However, Angioni further argues that to know according to accident *in the sophistic way* is a function of the sophist's intentions: 'What defines an argument as a sophism is its *purpose*: the sophist uses an argument with the purpose of producing a false semblance of wisdom' (*ibid.* 103). On this view, it's possible to know according to accident in two different ways: either sophistically or

non-sophistically. Suppose that I know according to accident that 2R belongs to all triangles by means of Proof 2. My according-to-accident knowledge is *not* sophistic as long as I don't use it to create a false semblance of wisdom. For example, I might be aware that Proof 2 does not pick out the appropriate explanation and that it's merely the best explanation I currently have available to me. Because I am aware of the limits of my knowledge, I do not make use of my according-to-accident knowledge in order to appear wise. Indeed, Angioni thinks that there 'is nothing wrong' with these types of explanation '*if they are taken as such*, namely, as the best that can be done on the available evidence' (*ibid.* 103). If, on the other hand, I use my according-to-accident knowledge in order to appear wise (or wiser than I am), then my according-to-accident knowledge is sophistic. Thus, on Angioni's interpretation, whether or not my knowledge is sophistic depends primarily on what I choose or intend to do with my knowledge. If I use it in order to deceive people into thinking I am wise, then I know in a sophistic way. If not, I know non-sophistically.[99]

There are, however, two *prima facie* issues for this interpretation. The first is that Aristotle's description of the sophistic way of knowing in *Posterior Analytics* 1.5 (T2.10) makes no mention of the sophist's nefarious intentions. Rather, the sophistic way of knowing is described simply as an epistemically deficient way of knowing: one knows in the sophistic way that 2R belongs to triangle when one fails to know that 2R belongs to triangle *as* triangle. This deficiency is apparently independent of what one chooses or intends to do with one's knowledge. What's more, Aristotle uses the sophistic way of knowing to illustrate a case of epistemic delusion: when someone knows in the sophistic way that 2R belongs to all triangles by means of Proof 2, they may mistakenly think that they have proven something universally and primitively (*APo* 1.5: 74a4-10).[100] As such, they mistakenly take themselves to

---

[99] It's unclear how Angioni would account for cases in which someone doesn't intend to create a false semblance of wisdom (at least not consciously) but nonetheless misrepresents themselves as wise because of a lack of epistemic self-awareness, e.g. a case in which (i) one knows according to accident, (ii) is unaware that one knows according to accident, and so (iii) unintentionally creates a false semblance of wisdom. This person neither has the sophistic intention nor are they aware of the limits of their knowledge.

[100] See also §2.3.2.1 and Hasper 2006.

know without qualification. Given that the sophistic knower might be deluded about their epistemically deficient condition, it could hardly be said that all sophistic knowers are aware of and thus intentionally exploit their according-to-accident knowledge. Second, on Angioni's interpretation the sophist's nefarious intentions are independent of their epistemic condition. Indeed, they could even be an afterthought: having come to know according to accident that 2R belongs to all triangles, I could later choose to use my according-to-accident knowledge to appear wise. But if that's true, the sophistic way of knowing isn't a way of knowing at all. Instead, it's just something the sophist does with their knowledge. This fails to do justice to Aristotle's contrast in T1.1 between two ways of knowing: knowing without qualification (ἐπίστασθαι ἁπλῶς) and knowing in the sophistic way according to accident (ἐπίστασθαι τὸν σοφιστικὸν τρόπον τὸν κατὰ συμβεβηκός).[101] If the sophistic way is just what the sophist does with their according-to-accident knowledge, why not contrast knowing without qualification with knowing according to accident?

In this section I motivate an alternative interpretation of the sophistic way of knowing, according to which (i) the sophist's choice of life is prior to their nefarious intentions to create a false semblance of wisdom and (ii) the sophist's choice of life is prior to and determinative of their epistemic condition. As Aristotle presents them, sophists are money makers who choose to make money through the appearance of wisdom – this is their choice of life. As a consequence, they (i) choose to create a false semblance of wisdom in order to make money through the appearance of wisdom and (ii) they choose to pursue whatever epistemic condition is sufficient to make money by appearing wise. By the sophist's lights, the best epistemic condition is whatever epistemic condition is sufficient to achieve that end. If knowing according to accident is sufficient, then knowing according to accident is best (or, perhaps, good enough). Indeed, the sophist doesn't care that they "merely" know according to accident, because according to accident knowledge is sufficient

---

[101] In T1.1 I read ἁπλῶς as modifying ἐπίστασθαι (as opposed to οἰόμεθα) and μὴ τὸν σοφιστικὸν τρόπον τὸν κατὰ συμβεβηκός as an adverbial accusative also modifying ἐπίστασθαι.

for the good the sophist chooses to pursue. The sophistic knower's choices (epistemic and otherwise) are therefore directed by their choice of life and the system of value entailed by that choice. This yields a broader picture of the sophistic "way" of knowing: the sophist's way of knowing is neither merely their epistemic state (e.g. knowing according to accident), nor merely what they choose or intend to do with their knowledge (e.g. create a false semblance of wisdom); it is also a way of going about knowing, of conducting oneself as a knower, and evaluating the worth of different epistemic states.

Before turning to Aristotle's description of the sophists, it's worth making a couple of points clear. First, I do not deny that Aristotle depicts sophists as having nefarious intentions. For example, Aristotle claims that sophists are bad and blameworthy in virtue of the choices they make (*Top* 4.5: 126a30-36). Aristotle also suggests that the sophists might be aware of their epistemic deficiencies, claiming that the sophists are compelled to take their fee before delivering their services, 'because no one would pay them money for what they do know' (*EN* 9.1: 1164a, cf. 7.2: 1146a21-27).[102] Consequently, I do not contend that the sophist's intention to create a false semblance of wisdom is not a characteristic feature of the sophist. Rather, my concern is that Angioni's interpretation implies that (or is at least consistent with) the sophist's choice being independent of their epistemic state. For example, I might come to know something according to accident and, after the fact, choose to use my knowledge to create a false semblance of wisdom. In so doing, I would become a sophistic knower solely in virtue of my *post hoc* choices about how to use my knowledge. I argue instead that Aristotle's characterisation of the sophist suggests a dependency between the sophist's choice of life and their epistemic state: the sophist knows according to accident because knowing according to accident is typically sufficient for their choice of life. It's also true that the sophist chooses to create a false semblance of wisdom, but both this and their choice to know according to accident are subordinate to and for the sake of their choice of life. Second, when I speak of "the sophists" I refer to Aristotle's depiction of sophists in the extant *Corpus*. These sophists are characters in Aristotle's texts, just as Aristotle

---

[102] […] διὰ τὸ μηδένα ἂν δοῦναι ἀργύριον ὧν ἐπίστανται.

describes "the philosopher" or "the dialectician" (e.g. *Met* 4.2: 1004b17-26, *Rhet*. 1.1: 1355b15-21). I remain neutral on the extent to which Aristotle's characterisation was true of actual sophists, self-professed or otherwise. Also, I do not take into consideration any of Aristotle's accounts of individuals who were also known as sophists (e.g. Protagoras in *Metaphysics* 4.4-6) which I consider to be conceptually distinct from Aristotle's character of the sophist.

3.2.1. *The priority of the sophist's choice of life*

With reference to Aristotle's characterisation of the sophist's choice in *Sophistic Refutations* 1 (165a19-2), *Metaphysics* 4.2 (1004b22-6), and *Rhetoric* 1.1 (1355b17-8), Angioni claims that '[w]hat defines an argument as a sophism is after all its *purpose*: the sophist uses an argument with the purpose of producing a false semblance of wisdom'. This purpose is, in turn, characteristic of the sophistic way of knowing (Angioni 2016: 103). In this section, I argue for an alternative interpretation of the sophist's choice, according to which the sophist's primary choice is their choice of life. This choice of life in turn determines their other choices, both to create a false semblance of wisdom and to merely know according to accident.

The *Sophistical Refutations* is predominantly concerned with giving an account of 'what appear to be refutations but are really mis-reasonings and not refutations' (*SE* 1: 164a20-21)[103],[104] The theme of appearance is central to Aristotle's treatment of the sophists and their arguments (λόγοι). Arguments can appear genuine when they are not, just as (using Aristotle's examples) someone who is not beautiful can appear so by embellishing themselves; or something that is dyed yellow can appear golden, when in fact it isn't (164a23-24). In each case, the sham appears genuine through both a certain similarity with the genuine article and the inexperience of the observer (164a25-27). Those who are inexperienced concerning proper argument will fail to distinguish a case of mis-reasoning from a genuine

---

[103] [...] τῶν φαινομένων μὲν ἐλέγχων, ὄντων δὲ παραλογισμῶν ἀλλ᾽ οὐκ ἐλέγχων.

[104] Translations from the *Sophistical Refutations* follow Pickard-Cambridge in Barnes 1984.

deduction, i.e. one in which the conclusion does in fact follow by necessity from the premises. But how do arguments deceive us? Aristotle tells us that one of the most well-developed and common reasons is that arguments must make use of names in place of the things themselves (165a3-10), just as counters are used to represent quantities of money when we make calculations. But counters, like names, can be manipulated in a manner that is misleading and deceptive:

T3.1 And so just as, in that case, those who are not clever at taking the counters are misled by those who are knowledgeable, [it's] the same way in the case of arguments too: those who are inexperienced in the power of names mis-reason both when they are themselves conversing and when they are listening to others. And so, for this reason and for others to be said later, there is deduction and refutation that appear [to be real] but are not. (*SE* 1: 165a13-19)

ὥσπερ οὖν κἀκεῖ οἱ μὴ δεινοὶ τὰς ψήφους φέρειν ὑπὸ τῶν ἐπιστημόνων παρακρούονται, τὸν αὐτὸν τρόπον καὶ ἐπὶ τῶν λόγων οἱ τῶν ὀνομάτων τῆς δυνάμεως ἄπειροι παραλογίζονται καὶ αὐτοὶ διαλεγόμενοι καὶ ἄλλων ἀκούοντες. Διὰ μὲν οὖν ταύτην τὴν αἰτίαν καὶ τὰς λεχθησομένας ἔστι καὶ συλλογισμὸς καὶ ἔλεγχος φαινόμενος οὐκ ὢν δέ.

Just as those who are not clever at counting with counters may be deceived or cheated by those who are knowledgeable, we may also be deceived when arguing with names.[105] If I lack the appropriate knowledge or experience, I may be misled either when I am taking part in a discussion or listening to one. Indeed, a notable aspect of the *Sophistical Refutations* is that Aristotle is not merely concerned to point out what the sophists do wrong. In addition, he gives an account of sophistic and merely apparent refutations in order that we will learn not to mis-reason in our own inquiries (*SE* 16: 175a9-12).[106] In this sense the *Sophistical Refutations* is intended to help a philosopher-inquirer who as of yet is unable to distinguish genuine refutations from false ones.

---

[105] On the limits and pitfalls of the analogy between counting with counters and arguing with names, see *SE* 1: 165a10-13 and Schreiber 2013: 11-18.

[106] See also *SE* 1: 165a24-27, 6: 168a17-20, b4-10, 7: 169a31-33, 8: 169b27-34.

Now, just as sophistic refutations appear to be genuine when they are not, the sophist also appears to be wise when they are not. Here's what Aristotle has to say about them:

T3.2 But since it's more to the task of certain people to seem to be wise, than to be wise and not seem so (for the sophistic skill is appearing wise but not being so, and the sophist is a money-maker from appearing wise but not being so), it is clear that it is necessary for these people also to seem to accomplish the task of a wise man, more than to accomplish it and not seem to do so. To reduce it to a single point of contrast: it is the task of one who knows each [thing], himself not to speak falsely about that which he knows, and to have the power to expose someone who speaks falsely. Of these, one is a power to give an argument, the other to take one. And so, those who wish to be sophists, by necessity, seek after the kind of arguments we have mentioned [i.e. παραλογισμοί: arguments that appear genuine but are not]; for, it is to their task; for a power of this sort will make them appear wise, and this is the choice they happen to have made. (*SE* 1: 165a20-31)

ἐπεὶ δ' ἐστί τισι μᾶλλον πρὸ ἔργου τὸ δοκεῖν εἶναι σοφοῖς ἢ τὸ εἶναι καὶ μὴ δοκεῖν (ἔστι γὰρ ἡ σοφιστικὴ φαινομένη σοφία οὖσα δ' οὔ, καὶ ὁ σοφιστὴς χρηματιστὴς ἀπὸ φαινομένης σοφίας ἀλλ' οὐκ οὔσης), δῆλον ὅτι ἀναγκαῖον τούτοις καὶ τοῦ σοφοῦ ἔργον δοκεῖν ποιεῖν, μᾶλλον ἢ ποιεῖν καὶ μὴ δοκεῖν. ἔστι δ' ὡς ἓν πρὸς ἓν εἰπεῖν ἔργον περὶ ἕκαστον τοῦ εἰδότος ἀψευδεῖν μὲν αὐτὸν περὶ ὧν οἶδε, τὸν δὲ ψευδόμενον ἐμφανίζειν δύνασθαι. ταῦτα δ' ἐστὶ τὸ μὲν ἐν τῷ δύνασθαι δοῦναι λόγον, τὸ δ' ἐν τῷ λαβεῖν. ἀνάγκη οὖν τοὺς βουλομένους σοφιστεύειν τὸ τῶν εἰρημένων λόγων γένος ζητεῖν· πρὸ ἔργου γάρ ἐστιν· ἡ γὰρ τοιαύτη δύναμις ποιήσει φαίνεσθαι σοφόν, οὗ τυγχάνουσι τὴν προαίρεσιν ἔχοντες.

Note Aristotle's final remark: the sophist's choice is to appear wise. This is bound up with Aristotle's description of sophists as money-makers, who make money by appearing wise even though they are not. But note, also, that the sophist need not have chosen merely to appear wise. We have no reason to assume that it wouldn't on occasion befit the sophist's purposes both to be and to appear wise.[107] Indeed, there might be circumstances in which being wise is necessary in order to appear

---

[107] MM McCabe makes a similar suggestion concerning sophistic arguments in Plato's *Euthydemus*: 'Surely sound arguments could serve the sophists' evil ends just as well as shaky ones?' (McCabe 1994: 74)

wise, e.g. in order to appear wise in front of a crowd who are knowledgeable of a particular topic (say, geometry), the sophist would have to in fact complete the task of the wise person by not speaking falsely about geometry.[108] Consequently, making money through the appearance of wisdom is consistent with appearing wise because one is wise. Aristotle's point, however, is that it's necessary for the sophist's purposes to appear wise over and above being wise, because it would not be worth their while to be wise and risk not appearing so. And this is because appearing wise is necessary for their money-making task: if they failed to appear wise to their prospective clients, no one would pay the sophists for instruction. Aristotle's thought in this passage, then, is not that the sophist's primary choice is to merely appear to be wise. Rather, their choice of life is prior to their choice to create a false semblance of wisdom, because they choose arguments that appear genuine but are not in order to make money by appearing wise. In this sense, their choice to create a false semblance of wisdom is directed by their choice to make money by appearing wise, because the most prudent method is to develop a skill for appearing wise even though one is not.

That the sophist's choice to create a false semblance of wisdom is subordinate to their choice to make money by appearing wise, is further suggested by Aristotle's characterisation of the sophist in *Metaphysics* 4.2:

T3.3 […] for, dialecticians and sophists take on the same shape as the philosopher, for sophistic is only the appearance of wisdom, and dialecticians converse about all things, and being is common to all [things], but it is clear that they converse about these things because they are appropriate to philosophy. For, sophistic and dialectic turn around the same kind as philosophy, but it differs [from dialectic] in the power [required] for its way, and it differs [from sophistic] in respect of the choice of life. Dialectic is critical whereas philosophy is capable of knowing about these things, and sophistic appears [to be capable of knowing] but is not. (*Met* 4.2: 1004b17-26)

[…] οἱ γὰρ διαλεκτικοὶ καὶ σοφισταὶ τὸ αὐτὸ μὲν ὑποδύονται σχῆμα τῷ φιλοσόφῳ· ἡ γὰρ σοφιστικὴ φαινομένη μόνον σοφία ἐστί, καὶ οἱ

---

[108] Cf. *APo* 1.12: 77b9-15.

διαλεκτικοὶ διαλέγονται περὶ ἁπάντων, κοινὸν δὲ πᾶσι τὸ ὂν ἐστιν, διαλέγονται δὲ περὶ τούτων δῆλον ὅτι διὰ τὸ τῆς φιλοσοφίας ταῦτα εἶναι οἰκεῖα. περὶ μὲν γὰρ τὸ αὐτὸ γένος στρέφεται ἡ σοφιστικὴ καὶ ἡ διαλεκτικὴ τῇ φιλοσοφίᾳ, ἀλλὰ διαφέρει τῆς μὲν τῷ τρόπῳ τῆς δυνάμεως, τῆς δὲ τοῦ βίου τῇ προαιρέσει· ἔστι δὲ ἡ διαλεκτικὴ πειραστικὴ περὶ ὧν ἡ φιλοσοφία γνωριστική, ἡ δὲ σοφιστικὴ φαινομένη, οὖσα δ' οὔ.

The sophist and the philosopher are extremely close in their appearance: both are concerned with being, and the sophist also appears to be capable of knowledge. Whereas the way of dialectic differs from philosophy in its power (dialectic examines), the sophist differs from the philosopher in respect of their choice of life. Indeed, Aristotle makes the very same point in *Rhetoric* 1.1: 'for, the sophistic skill is not in the power but in the choice' (1355b17-18).[109] But what is the sophist's choice of life? Choosing merely to appear wise would be a strange choice of life; it's unclear what could recommend the mere appearance of wisdom as an end in itself. More plausibly, the sophist's choice of life is to make money, and that by means of having a reputation for wisdom.[110] This choice will govern and organise the sophist's life, such that all other value will be instrumental on the goal of making money and all choices will be directed towards that goal.[111] And even though it might on occasion befit the sophist's purposes to actually be wise (i.e. in cases where it is necessary to be wise in order to appear wise) it is sufficient for the sophist's goal of making money through the appearance of wisdom that they merely appear wise. As such, the sophist will first and foremost choose both to know and to argue in a manner that, more often than not, assures their appearance of wisdom. And they cultivate the skill of merely appearing wise in order to complete this task.

The sophist's epistemic aims and goals are thus determined by their choice of life: someone who chooses to make money through the appearance of wisdom would do better to focus on appearing wise when they are not, over and above

---

[109] ἡ γὰρ σοφιστικὴ οὐκ ἐν τῇ δυνάμει ἀλλ' ἐν τῇ προαιρέσει·

[110] See also *SE* 11: 171b25 *ff.*

[111] *EN* 1.1: 1094a1-18, 1.7: 1097a18-24, *EE* 1.2: 1214b6-14, 2.10: 1227a13-18, cf. *EN* 1.5: 1096a5-10.

being wise. To this end, the sophist chooses to acquire only the knowledge that is sufficient to secure this appearance. They may, for example, merely know something according to accident, such that they might appear wise in front of an unknowledgeable audience (e.g. by means of Proof 2). They may also develop the sophistic skill (ἡ σοφιστικὴ) in order to appear wise by appearing to refute those who know. In spite of the sophist's lack of wisdom, their skill is nonetheless a form of knowledge (or, at least, a certain developed epistemic state) which the sophist must cultivate in order to reliably appear wise.[112] As such, the sophist's choice of life dictates and gives value to their epistemic choices, because it entails that any and all knowledge (or epistemic state) is only of value for the money one can generate with it by appearing wise. The sophist therefore chooses to merely know according to accident and to acquire the sophistic skill because this is sufficient for the end they choose to pursue. As a consequence, the sophistic way of knowing is not merely what the sophist does with their deficient epistemic state. Rather, the sophist's "way" is to choose whatever knowledge (or epistemic state) that will facilitate and is sufficient for appearing wise. In this sense, their choice of life is prior to their choice to create a false semblance of wisdom. And the choice of life is in part constitutive of their way of knowing, because it determines the kind of knowledge that is worth achieving.

This reading has the distinct benefit of ensuring that the sophistic way of knowing is not merely something that the sophist does with their knowledge. Rather, the sophistic way is a way of evaluating the worth of different epistemic states and thus of conducting oneself as a knower – where this includes both the type of knowledge that the sophist typically strives for (e.g. the sophistic skill, according to accident knowledge) and what they do with that knowledge (e.g. create a false semblance of wisdom). However, my view still faces the difficulty that Aristotle's description of the sophistic way of knowing in *Posterior Analytics* 1.5

---

[112] That the sophists are in some sense knowledgeable is further suggested by the fact that Aristotle describes those who deceive by calculating with counters as knowledgeable (ἐπιστήμων) (T3.1). Perhaps, then, the sophist who deceives by arguing with names is also knowledgeable, at least in so far as they know how to trick others with words.

makes no mention of the sophist's choice, suggesting that someone could plausibly know in the sophistic way yet not be a sophist (§3.2). For example, I can know that 2R belongs to all triangles by means of Proof 2 and thus know in the sophistic way (i.e. according to accident) yet not be a sophist because I do not choose the sophist's life. The problem is that, on my view, the sophistic way of knowing is directed and characterised by the sophists choice of life. Nonetheless, Aristotle's point in *Posterior Analytics* 1.5 need not be that everyone who knows that 2R belongs to all triangles by means of Proof 2 is a sophistic knower. Rather, their accidental knowledge that 2R belongs to all triangles is characteristic of the sophist, who typically knows according to accident because such knowledge is sufficient for their purposes. In so doing, the person who knows according to accident in *Posterior Analytics* 1.5 manifests a characteristic of the sophistic way of knowing, i.e. they know according to accident. But they are not a sophistic knower (broadly construed) because they do not subscribe to the sophist's choice of life and the evaluative system entailed by that choice.

3.2.2. *The sophist's challenge*

So far, I've argued that the sophist's choice of life is prior to their choice to create a false semblance of wisdom, and that their choice of life determines the knowledge that they pursue. If making money is the end for the sake of which one's life ought to be organized, then one's epistemic condition is only of instrumental value with respect to this end. On this view, the sophists are not merely epistemic villains that trick others into thinking that they are wise. They also personify a substantive thesis about the value of knowledge, i.e. that the sole value of any and all knowledge (or epistemic state) is instrumental upon the value of making money through the appearance of wisdom. If knowing according to accident is sufficient to make money through the appearance of wisdom, then one need only know according to accident. If mere opinion is sufficient, then one need only opine (etc.). This account of the value of knowledge (and epistemic states broadly construed) presents a direct challenge to Aristotle's epistemic ideal: if knowing without qualification is

unnecessary for the purpose of making money through the appearance of wisdom, then one need not strive to know without qualification. Indeed, the sophists are a case in point that one need *not* know without qualification in order to make money by appearing wise: sophistical refutations and according to accident knowledge will clearly suffice. What's more, the sophistic knower need not deny that knowing without qualification is to be most knowing. They may even agree with Aristotle (at least in private) that we are most knowing when we achieve causal knowledge of necessities. What the sophistic knower denies is that we have reason to be most knowing, i.e. because knowing without qualification is not necessary to achieve the good of making money through the appearance of wisdom.

Given this, we might suppose that Aristotle's choice to juxtapose without qualification knowledge with the sophistic way of knowing in T1.1 is significant. Aristotle is not merely contrasting his epistemic ideal with an epistemically deficient way of knowing; he is also setting his epistemic ideal alongside a way of knowing that presupposes an account of the value of knowledge that entails that without qualification knowledge is not worth striving for. This is suggestive that questions about the value of different ways of knowing are at the heart of his epistemic project in the *Posterior Analytics*.[113] And this thought is corroborated by Aristotle's only other explicit mention of sophists in the *Posterior Analytics*:

T3.4   From these things it is also clear that those people are naïve who think that they assume their principles well if the propositions are reputable and true, e.g. the sophists [who assume] that to know is to have knowledge. For it is not what is reputable to us that is a principle, but rather what is primitive in kind with which the proof is concerned; and not every truth is appropriate. (*APo* 1.6: 74b21-26)

---

[113] For this reason, I disagree with Burnyeat's contention that τὸν σοφιστικὸν τρόπον 'adds nothing (except abuse)' to the fact that such knowledge is κατὰ συμβεβηκός (Burnyeat 1981: 100 n.4). Burnyeat is correct to suppose that the sophistic way is a way of knowing that is characteristically according to accident (see also *Met* 6.2: 1026b15 *ff.*), but mistaken that this adds nothing beyond insult. Rather, the sophistic way of knowing represents a substantive thesis about the nature and value of knowledge, thus raising questions about epistemic value.

δῆλον δ' ἐκ τούτων καὶ ὅτι εὐήθεις οἱ λαμβάνειν οἰόμενοι καλῶς τὰς ἀρχάς, ἐὰν ἔνδοξος ᾖ ἡ πρότασις καὶ ἀληθής, οἷον οἱ σοφισταὶ ὅτι τὸ ἐπίστασθαι τὸ ἐπιστήμην ἔχειν. οὐ γὰρ τὸ ἔνδοξον ἡμῖν ἀρχή ἐστιν, ἀλλὰ τὸ πρῶτον τοῦ γένους περὶ ὃ δείκνυται· καὶ τἀληθὲς οὐ πᾶν οἰκεῖον.

The sophists are not here described as bad or morally bankrupt, but instead as simple minded for thinking it sufficient to assume principles that are only reputable and true. Significantly, Aristotle gives the example of an epistemological tenet of the sophists: that to know is to have knowledge.[114] Perhaps, then, the sophists are not only naïve because they think it sufficient to assume principles that are reputable and true (a second-order worry), but also to suppose that "to know is to have knowledge" is a suitable account of knowledge (a first-order worry).[115] Indeed, Aristotle might have offered this example precisely because it allows for a misleading view about the value of knowledge. This is because the sophistic account of knowledge is ambiguous between a number of different senses of having:

T3.5   Having is said in a number of ways; for, [i] having as a state and condition or some other quality (for, we are said to have knowledge and virtue); or [ii] as a quantity, e.g. the height someone might have (for, he is said to have a height of three or four forearms); or [iii] as things on the body, e.g. a cloak or tunic ; or [iv] as on a part, e.g. a ring on a hand; or [v] as a part, e.g. a hand or foot; or [vi] as in a container, as with the measure of wheat or the jar of wine (for, the jar is said to have wine, and the measure wheat, so these are said to have as in a container); or [vii] as a possession (for we are said to have a house and a field). (*Cat* 15: 15b17-27)[116]

Τὸ ἔχειν κατὰ πλείονας τρόπους λέγεται· ἢ γὰρ ὡς ἕξιν καὶ διάθεσιν ἢ ἄλλην τινὰ ποιότητα, – λεγόμεθα γὰρ ἐπιστήμην ἔχειν καὶ ἀρετήν· – ἢ ὡς ποσόν, οἷον ὃ τυγχάνει τις ἔχων μέγεθος, – λέγεται γὰρ τρίπηχυ μέγεθος ἔχειν ἢ τετράπηχυ· – ἢ ὡς τὰ περὶ τὸ σῶμα, οἷον ἱμάτιον ἢ χιτῶνα· ἢ ὡς ἐν μορίῳ, οἷον ἐν χειρὶ δακτύλιον· ἢ ὡς μέρος, οἷον χεῖρα ἢ πόδα· ἢ ὡς ἐν ἀγγείῳ, οἷον ὁ μέδιμνος τοὺς πυροὺς ἢ τὸ κεράμιον τὸν

---

[114] See also *Euthydemus* 277b, *Theaetetus* 197a-c.

[115] See also *EN* 10.9: 1181a12-b12.

[116] Translations from the *Categories* follow Ackrill 1963.

οἶνον, – οἶνον γὰρ ἔχειν τὸ κεράμιον λέγεται, καὶ ὁ μέδιμνος πυρούς· ταῦτ' οὖν ἔχειν λέγεται ὡς ἐν ἀγγείῳ· – ἢ ὡς κτῆμα· ἔχειν γὰρ οἰκίαν καὶ ἀγρὸν λεγόμεθα.

When the sophists say that to know is to have knowledge, it's unclear in what sense knowledge is had. Indeed, the sophists' instrumentalist account of the value of knowledge might push us towards supposing that knowledge is something that one has in the sense of a possession. Such possessions are often valuable in so far as they are means to further ends, e.g. a house for shelter or a field for food or income.[117] Notably, however, Aristotle does not claim that the sophistic account of knowledge is false (indeed, it's both reputable and true). Rather, Aristotle suggests that it's not a suitable first principle because it's *merely* reputable and true. As T3.5 suggests, Aristotle thinks that knowledge *is* something that we have, but as a state rather than a possession.[118]

In the remainder of this thesis, I argue that Aristotle meets the sophistic challenge by grounding the value of his epistemic ideal on the thought that knowledge is something that we have in the sense of a state. In particular, the value of knowledge is to be found in the fact that knowledge is not merely a state of the soul, but a *virtuous* state of the soul. As such, Aristotle's claim about the naïvety of the sophists in T3.4 is manifold: not only are the sophists mistaken to suppose that it's sufficient to assume principles that are reputable and true, and not only is it insufficient to suppose that knowledge is to have knowledge; the sophists are also mistaken about the fundamental nature of knowledge and thus its proper value. As such, they are also naïve because they miss out on the proper value of knowledge.

On this view, T1.1's account of what it is to know without qualification is not Aristotle's ultimate definition of knowledge, i.e. it is not an appropriate first principle. Instead, knowledge without qualification is_def a demonstrative state of the

---

[117] Of course, possessions need not only have instrumental value, but the sophists' account of the value of knowledge may be corroborated by the thought that knowledge is had in the sense of a possession.

[118] See also *Phys* 7.3: 247b1 *ff.*

soul and, thus, a virtuous state of the soul.[119] It's this definition that properly characterizes the essential nature of without qualification knowledge and can account for its proper value. Part II of this thesis is dedicated to explaining how and in what sense knowledge is valuable because it is a virtuous state. In the next section, I argue for the view that Aristotle did indeed conceive of knowledge first and foremost as a demonstrative state of the soul. To this end, I argue that Aristotle's account of without qualification knowledge in T1.1 is in fact a preliminary account of knowledge, from which to embark upon an inquiry into the essential nature of knowledge. This will provide Aristotle with the framework with which to meet the sophistic knower's challenge by explaining the proper value of knowledge in virtue of its essential nature.

3.3. Knowledge as a demonstrative state of the soul

T1.1 is naturally read as Aristotle's definition of what it is to know without qualification. Notably, the *Posterior Analytics* is explicitly concerned with definition and its proper role with respect to both knowing and inquiring (particularly in *Posterior Analytics* 2.3-10 and 2.13). However, as far as I'm aware there has been little consideration of T1.1 in relation to Aristotle's explicit discussion of definition in the very same text. Supposing that the *Posterior Analytics* is itself an inquiry into knowledge, we might then ask: when inquiring into the nature of knowledge, did Aristotle adhere to his own account of the proper role of definition therein?[120] In this

---

[119] Knowledge is a virtuous state of the soul because it is a state by means of which the soul grasps necessary truths most of all, i.e. demonstratively. In Chapter 4, I examine the sense in which certain states of the soul are intellectual virtues because we grasp truth most of all in virtue of them (§§4.3-4).

[120] The supposition that the *Posterior Analytics* is in some sense an inquiry is certainly not farfetched. In three other texts Aristotle explicitly describes what he is doing as inquiring (ζητέω: *DA* 1.1: 402a21, *Met* 1.2: 982a4; ἐπιζητέω: *Insomn* 1: 458a33). Although Aristotle describes the *Analytics* as an examination into demonstration and demonstrative knowledge (σκέψις, *APr* 1.1: 24a10-11) rather than an inquiry (ζήτησις), I see no reason to suppose that the *Analytics* does not represent a genuine inquiry into knowledge. Indeed, if texts such as the *De Anima*, *Metaphysics*, and *On Dreams* could be characterized as inquiries by Aristotle's own lights, then it's hard to see what would

section I argue that there is at least one sense in which Aristotle practised what he preached: T1.1 offers a preliminary account of what it is to know without qualification, which acts as Aristotle's starting point for an investigation into the essential nature of knowledge. On this view, T1.1 is not Aristotle's ultimate definition of knowledge; rather, Aristotle's considered view is that knowledge is_def a demonstrative state of the soul.

In order to determine the status of Aristotle's account of without qualification knowledge in T1.1, we must first take a detour into Aristotle's taxonomy of definitions in *Posterior Analytics* 2.10. Before embarking, however, it should be noted that the following is not intended as a critical study of Aristotle's account of definition in the *Posterior Analytics*. Rather, I intend to apply a number of relatively uncontroversial points to Aristotle's account of knowledge in the *Posterior Analytics*. Broadly speaking, I take two points to be uncontentious: (i) that Aristotle considered definitional knowledge of essential natures to be necessary for demonstrative knowledge and (ii) that in order to arrive at such definitional knowledge, we must (or must typically) start with a so-called preliminary account of the *definiendum* that grasps something of the thing itself. As a consequence of (i), in order to know about knowledge we must arrive at a definition of the essential nature of knowledge. As a consequence of (ii), in order to arrive at this definition our inquiry must (or should ideally) begin with a preliminary account of knowledge that grasps something of the thing itself. Although I consider these points relatively uncontroversial, I make a case for them below.

---

disqualify the *Analytics* from falling under the same remit. Aristotle refers to other texts as: (i) an inspection or examination (ἐπίσκεψις: *Sens* 1: 436a3; σκέπτομαι: *Mem* 1: 449b9, *Met* 1.2: 982a5; ἐπίσκέπτομαι: *Insomn* 1: 453b11, *Long* 1: 464b21, *MA* 1: 698a3, *IA* 1: 704a5, *Pol* 1.13: 1260b23; σκοπέω: *GA* 1.1: 715a14); (ii) an investigation (μέθοδος: *Phys* 1.1: 184a11, *Meteor* 1.1: 338a25, *PA* 1.1: 639a1, *EN* 1.2: 1094b11, *EE* 1.1: 1214a14); (iii) a study (θεωρία: *PA* 1.1: 639a1; θεωρέω: *Pol* 2.1: 1260b27); and (iv) a thesis (πρόθεσις: *Top* 1.1: 100a189).

3.3.1.   Types of definition in Posterior Analytics 2.10

In *Posterior Analytics* 2.10, Aristotle lists three types of definition:[121]

T3.6   Consequently, [Definition Type 1] one definition is an indemonstrable account of what something is; [Definition Type 2] another is a deduction of what something is, differing in arrangement from the demonstration; and third [Definition Type 3] is a conclusion of the demonstration of what something is. (*APo* 2.10: 94a11-14)[122]

Ἔστιν ἄρα ὁρισμὸς εἷς μὲν λόγος τοῦ τί ἐστιν ἀναπόδεικτος, εἷς δὲ συλλογισμὸς τοῦ τί ἐστι, πτώσει διαφέρων τῆς ἀποδείξεως, τρίτος δὲ τῆς τοῦ τί ἐστιν ἀποδείξεως συμπέρασμα.

Let's begin with Definition Type 2, which Aristotle describes as a deduction of what something is, differing in arrangement from the demonstration. Aristotle offers the following example of thunder (*APo* 2.10: 94a3-7):

Type 2 Definition

Thunder is_def [A] noise of [B] fire being extinguished in [C] the clouds.

---

[121]   I won't address the question of whether Aristotle considered so-called nominal accounts to be a type of definition, strictly speaking, but I consider it notable that Aristotle does not include nominal accounts in his list of definition types in T3.6. I also won't consider the relationship between nominal accounts and so-called preliminary accounts, although I discuss preliminary accounts in §3.3.2. Following a number of other commentators, I take it that some preliminary accounts are nominal accounts and that some nominal accounts are preliminary accounts. For example, a nominal account (i.e. an account or what a name of name-like account signifies, *APo* 2.10: 93b29-39) drawn from the ordinary language meaning of a name might state something of the thing itself, and thus count as a preliminary account and a suitable starting point for inquiry into what it is. For discussion, see Bolton 1976, Sorabji 1981: 217 n. 30, DeMoss and Devereux 1988: 222-225, Charles 2000: 23 *ff.*, Modrak 2010, Pellegrin 2010: 139-140, Bronstein 2016: 141-143, 158-159. Cf. Ackrill 1981: 374-375, Barnes 1994: 218-219.

[122] See also *APo* 1.8: 75b30-32.

This answers the interrogative, "What is thunder?", and can be rearranged into the following, continuous demonstration:

[A] Noise belongs to [B] fire being extinguished;

[B] Fire being extinguished belongs to [C] the clouds;

Therefore: [A] Noise belongs to [C] the clouds.[123]

This demonstration answers the question, "Why does it thunder?", by explaining that noise belongs to the clouds because of the explanatory middle term, fire extinguishing. As a consequence, it explains why it thunders in terms of the essential nature of thunder as a noise of fire being extinguished in the clouds.[124] All Type 2 Definitions must be of demonstrable attributes, otherwise they could not be rearranged into a demonstration that explains why the demonstrable attribute belongs to its subject, e.g. why noise belongs to the clouds.[125]

Definition Type 3 is the conclusion of the demonstration of what something is. Aristotle offers the following example (*APo* 2.10: 94a7-8):

Type 3 Definition

Thunder is_def [A] noise in [C] the clouds.[126]

---

[123] Cf. *APo* 2.8: 93b7-14, where Aristotle offers this demonstration twice but with different [A] terms. In the first case [A] is thunder, in the second it is noise. Nonetheless, [A] must be noise in order for the definition of thunder to be read from the demonstration (i.e. that thunder is_def [A] noise of [B] fire being extinguished in [C] the clouds). See Deslauriers 2007: 89.

[124] That this is both (i) a demonstration of what thunder is and also (ii) answers the question, "Why does it thunder?", is in virtue of the fact that Aristotle considers what something is and why something is to be the same (at least when it comes to demonstrative knowledge), e.g. the fact that "noise belongs to the clouds" is only properly explained by the essential nature of thunder as a noise of fire being extinguished in the clouds. See *APo* 2.2: 90a1, 14 *ff.*, 2.8: 93a3 *ff.*, 93b8, cf. *DA* 3.6: 430b28, *Met* 7.17: 1041a28-31.

[125] Bronstein 2016: 139-140.

[126] The example reads: 'Again, a definition of thunder is noise in the clouds; and this is a conclusion of the demonstration of what it is' (ἔτι ἐστὶν ὅρος βροντῆς ψόφος ἐν νέφεσι· τοῦτο δ' ἐστὶ τῆς τοῦ τί ἐστιν ἀποδείξεως συμπέρασμα). I take τοῦτο to refer

This definition is the conclusion of the previous demonstration, i.e. the conclusion of the demonstration of what thunder is. Type 3 Definitions are markedly similar to Type 2 Definitions; the only difference being that Type 2 Definitions include the explanatory middle term (fire extinguishing) and Type 3 Definitions do not. Since a Type 3 Definition is the conclusion of a demonstration of what something is, it follows that Type 3 Definitions must also be of demonstrable attributes only.[127]

Definition Type 1 is an indemonstrable account of what something is. Aristotle offers no example, but describes them as follows:

T3.7   The definition of immediates is an indemonstrable positing of what it is. (*APo* 2.10: 94a9-10)

ὁ δὲ τῶν ἀμέσων ὁρισμὸς θέσις ἐστὶ τοῦ τί ἐστιν ἀναπόδεικτος.

Such definitions are indemonstrable precisely because they are of immediates. And immediate or "un-middled" (ἄμεσος) items, *ex hypothesi*, lack a middle term by means of which to demonstrate them (*APo* 2.9: 93b21-28). Type 1 Definitions thus cannot be of demonstrable attributes. Instead, they must be of subject kinds.[128] For example:

T3.8   For the definition is a posit; for arithmeticians posit that a unit is that which is indivisible according to quantity (*APo* 1.2: 72a22-23)

ὁ γὰρ ὁρισμὸς θέσις μέν ἐστι· τίθεται γὰρ ὁ ἀριθμητικὸς μονάδα τὸ ἀδιαίρετον εἶναι κατὰ τὸ ποσόν·

---

to ψόφος ἐν νέφεσι. For reasons in favour of this reading, see Charles 2000: 199 n.5, Bronstein 2016: 140. For an alternative reading, see Ackrill 1981: 360-363. The difference is of little consequence for my use of *Posterior Analytics* 2.10. What's important for my purposes is that both Type 2 and Type 3 definitions are of demonstrable attributes.

[127] Bronstein 2016: 140.

[128] Either genera (e.g. animal, triangle) or species (e.g. human being, isosceles triangle).

From this we can formulate the following definition:

Type 1 Definition

A unit is_def an indivisible quantity.

Indemonstrable definitions are not the subject of explanation: the components of the *definiens* (e.g. indivisible, quantity) cannot be rearranged to form a continuous demonstration (as Type 2 Definitions can) nor can they be the conclusion of a demonstration (as Type 3 Definitions can).[129] However, indemonstrable definitions can be put to explanatory work as premises in demonstrations. Take, for example, the definition of triangle:

Type 1 Definition

[C] Triangle is_def [B] closed, three-sided, rectilinear figure.

This can be used in the following demonstration:

[A] 2R belongs to [B] closed, three-sided, rectilinear figure;

[B] Closed, three-sided, rectilinear figure belongs to [C] triangle;

Therefore: [A] 2R belongs to [C] triangle.

These, then, are Aristotle's three types of definition. Each of which gives an account of what the *definiendum* is, be it a demonstrable attribute (e.g. thunder, eclipse) or a subject-kind (e.g. unit, triangle). And Aristotle's exposition of the types of definition makes clear that definitional knowledge is essential for demonstrative knowledge: each type of definition has an essential role to play in demonstration, either as demonstrative premises (Type 1), demonstrative conclusions (Type 3), or as an account that can be rearranged into and thus reveal a demonstration (Type 2).

---

[129] Bronstein 2016: 138-139.

3.3.2. Preliminary accounts as a starting point for inquiry

How do we arrive at such definitions?[130] At the beginning of *Posterior Analytics* 2.10, Aristotle claims that our inquiries must begin with a non-accidental grasp of what something is:

T3.9   When we grasp that it is, we seek why it is. But it is difficult to take anything in this way if we do not know that it exists. The explanation of the difficulty was given earlier: that we do not even know whether it exists or not, except according to accident. (*APo* 2.10: 93b32-35)

ὅπερ ἔχοντες ὅτι ἔστι, ζητοῦμεν διὰ τί ἔστιν· χαλεπὸν δ' οὕτως ἐστὶ λαβεῖν ἃ μὴ ἴσμεν ὅτι ἔστιν. ἡ δ' αἰτία εἴρηται πρότερον τῆς χαλεπότητος, ὅτι οὐδ' εἰ ἔστιν ἢ μὴ ἴσμεν, ἀλλ' ἢ κατὰ συμβεβηκός.[131]

I won't here assess the plausibility of Aristotle's claims. What's important for my purposes is that Aristotle supposes that, in order to inquire as to why something is, we must (or should ideally) first grasp that it exists in a non-accidental way. Aristotle's backwards reference to the explanation of this difficulty is found in *Posterior Analytics* 2.8, where he explains that we must gain a non-accidental grasp of the fact that something exists before we seek its definition (93a14-29). Otherwise, we will attempt to inquire into what something is without having any real grasp of the fact that it exists, and Aristotle contends that 'to seek what something is without grasping that it exists is to seek nothing' (93a26-27).[132] Aristotle explains what is required to have a non-accidental grasp of the fact that something exists as follows:

T3.10   Just as we seek the reason why when we grasp the fact […] in the same way we plainly cannot grasp what it is to be something without grasping that it exists; for we cannot know what something is when we do not know

---

[130] What follows is in broad agreement with David Charles' three-stage interpretation of Aristotle's account of definitional inquiry (Charles 2000). See also Bronstein 2016: 69-222.

[131] Excising τί ἐστι (93b31) with the OCT.

[132] τὸ δὲ ζητεῖν τί ἐστι μὴ ἔχοντας ὅτι ἔστι, μηδὲν ζητεῖν ἐστιν.

whether it exists. But as to whether it exists, sometimes we grasp this according to accident, and sometimes by grasping something of the thing itself, e.g. of thunder that it is a certain noise of the clouds; and of eclipse that it is a certain privation of light; of human being that it is a certain animal; of soul that it moves itself. (*APo* 2.8: 93a16-24)

ὥσπερ γὰρ τὸ διότι ζητοῦμεν ἔχοντες τὸ ὅτι […] δῆλον ὅτι ὁμοίως καὶ τὸ τί ἦν εἶναι οὐκ ἄνευ τοῦ ὅτι ἔστιν· ἀδύνατον γὰρ εἰδέναι τί ἐστιν, ἀγνοοῦντας εἰ ἔστιν. τὸ δ' εἰ ἔστιν ὁτὲ μὲν κατὰ συμβεβηκὸς ἔχομεν, ὁτὲ δ' ἔχοντές τι αὐτοῦ τοῦ πράγματος, οἷον βροντήν, ὅτι ψόφος τις νεφῶν, καὶ ἔκλειψιν, ὅτι στέρησίς τις φωτός, καὶ ἄνθρωπον, ὅτι ζῷόν τι, καὶ ψυχήν, ὅτι αὐτὸ αὑτὸ κινοῦν.

Here Aristotle introduces what are sometimes described as preliminary accounts: an account that states something of the thing itself. Preliminary accounts are constitutive of a non-accidental grasp of the fact that something exists. In the case of thunder, for example, I grasp something of the thing itself if I grasp that thunder is a certain noise in the clouds, but not if I merely grasp that thunder frightens people (presumably because this is not a demonstrable attribute of thunder). A τις construction is typical of Aristotle's preliminary accounts (e.g. 'thunder is a certain [τις] noise in the clouds') and similarly for his generalised characterisation of preliminary accounts ('something [τι] of the thing itself').[133] When we compare Aristotle's preliminary account of thunder with his Type 2 Definition, we see that the preliminary account fails to display the explanatory component of the definition of thunder:

Preliminary account

Thunder is a certain noise of the clouds.

Type 2 definition

Thunder is$_{def}$ noise of fire being extinguished in the clouds.

---

[133] See also *APo* 2.8: 93a27-28, 93a29.

Where the definition of thunder details that thunder is a noise in the clouds *of fire being extinguished*, the preliminary account instead describes it as *a certain* noise in the clouds. And it is the fact that it is a noise in the clouds *of fire being extinguished* that explains why it thunders (i.e. why noise belongs to clouds). Hence, the preliminary account grasps something of the thing itself because being a noise in the clouds is part of the essential nature of thunder, but it does not include the feature of thunder's essential nature that makes clear what thunder is and explains why it thunders, i.e. its explanatory middle term.

As noted, thunder is Aristotle's prime example of Type 2 and 3 definitions, which apply to demonstrable attributes. But T3.10 also makes clear that we must seek preliminary accounts in the case of subject kinds, e.g. of human being and soul. Aristotle's example of the preliminary account for human being is "a certain animal", which details its genus (animal) but not its differentiae.[134] We could similarly imagine a preliminary account of triangle as "a certain closed, rectilinear, figure". In these cases, "a certain" stands in for some further differentia(e) that must be included in a Type 1 Definition, e.g. triangle is$_\text{def}$ a closed, *three-sided*, rectilinear figure. Whilst this type of definition cannot be transformed into a continuous demonstration (as Type 2 Definitions can), nor can it act as the conclusion of a demonstration (as Type 3 Definitions can), it can be used as a premise in a demonstration, e.g. a demonstration that explains why triangles have 2R. Importantly, it is specifically because triangles are *three-sided*, rectilinear, plane figures that they have 2R. Consequently, the common feature between preliminary accounts of demonstrable attributes (e.g. thunder) and subject-kinds (e.g., triangle) is that τις stands in for a part of the definition that will do explanatory work as or as part of the middle term in a demonstration.

In sum, Aristotle presents three types of definition in *Posterior Analytics* 2.10, one of which can be rearranged into a demonstration of what something is, which in turn explains why a demonstrable attribute belongs to its subject (Type 2); another of which states the essential nature of a subject and can thus be used as the

---

[134] Aristotle's example of the soul doesn't involve a τις, but it can readily be supplied: 'of soul, that it [is a certain thing that] moves itself'.

premise in an explanatory demonstration (Type 1); and another of which is the conclusion of a demonstration of what something is (Type 3). Each type of definition is essential for demonstrative knowledge. And in order to arrive at definitions of what something is (and thus explanations of why it is) Aristotle is clear that our inquiry must begin with a preliminary account of both demonstrable attributes and subject kinds. These preliminary accounts provide us with a non-accidental grasp of the fact that something exists by stating something of the thing itself. Nonetheless, preliminary accounts fail to grasp a component of the *definiens* that is essential for an explanatory demonstration. In the next section, I locate Aristotle's definition of without qualification knowledge in T1.1 within his taxonomy of definition and argue that it is best read as a preliminary account of knowledge: one that grasps something of the thing itself, but is not an explanatory definition. As such, it serves as an important starting point for his inquiry into knowledge in the *Posterior Analytics*, but is not Aristotle's definition of the essential nature of knowledge.

3.3.3. *T1.1 as a preliminary account*

Before returning to Aristotle's account of knowledge in T1.1, it's worth considering again Aristotle's synopsis of the nature of knowledge in *Nicomachean Ethics* 6.3:

T3.11 And so what knowledge is [will] henceforth be clear, if it is necessary to speak precisely and not be guided by likenesses. For we all suppose that what we know does not admit of being otherwise; whereas things that do admit [of being] otherwise, whenever they fall outside of our observation, it escapes [our] notice whether they are or not. Hence what is knowable is from necessity. Hence [it is] eternal; for things that are necessary without qualification are all eternal, and eternal things do not come to be or pass away. […] Therefore knowledge is a demonstrative state, and [has] the other additional things we specified in the *Analytics*; for [someone] knows when [they] are convinced in a certain way and the principles are known to them; for if [the principles are not] more [known to them] than the conclusion, they will have knowledge [only] according to accident. And so, concerning knowledge, let it be defined in this way. (*EN* 6.3: 1139b18-36)

ἐπιστήμη μὲν οὖν τί ἐστιν, ἐντεῦθεν φανερόν, εἰ δεῖ ἀκριβολογεῖσθαι καὶ μὴ ἀκολουθεῖν ταῖς ὁμοιότησιν. πάντες γὰρ ὑπολαμβάνομεν, ὃ ἐπιστάμεθα, μηδ' ἐνδέχεσθαι ἄλλως ἔχειν· τὰ δ' ἐνδεχόμενα ἄλλως, ὅταν ἔξω τοῦ θεωρεῖν γένηται, λανθάνει εἰ ἔστιν ἢ μή. ἐξ ἀνάγκης ἄρα ἐστὶ τὸ ἐπιστητόν. ἀίδιον ἄρα· τὰ γὰρ ἐξ ἀνάγκης ὄντα ἁπλῶς πάντα ἀίδια, τὰ δ' ἀίδια ἀγένητα καὶ ἄφθαρτα. […] ἡ μὲν ἄρα ἐπιστήμη ἐστὶν ἕξις ἀποδεικτική, καὶ ὅσα ἄλλα προσδιοριζόμεθα ἐν τοῖς ἀναλυτικοῖς· ὅταν γάρ πως πιστεύῃ καὶ γνώριμοι αὐτῷ ὦσιν αἱ ἀρχαί, ἐπίσταται· εἰ γὰρ μὴ μᾶλλον τοῦ συμπεράσματος, κατὰ συμβεβηκὸς ἕξει τὴν ἐπιστήμην. περὶ μὲν οὖν ἐπιστήμης διωρίσθω τὸν τρόπον τοῦτον.

The passage opens with a promise to make clear what knowledge is (ἐπιστήμη τί ἐστιν), which is plausibly understood as a promise to provide a definition of knowledge. Notably, Aristotle's eventual definition is not that knowledge is of what cannot be otherwise, nor that knowledge is of causes, but that knowledge is a demonstrative state (ἡ ἐπιστήμη ἐστὶν ἕξις ἀποδεικτική) with the additions specified in the *Analytics*. My proposal, then, is that T1.1's account of knowledge – that to know something without qualification is to know that it cannot be otherwise and know its cause – is not Aristotle's definition of knowledge. Rather, it is a preliminary account of without qualification knowledge, which serves as the starting point for Aristotle's inquiry into what knowledge is, i.e. that knowledge is_def a demonstrative state (and demonstrative in a particular sense).

To see this, it's worth considering the similarities between T3.11 and Aristotle's procedure in the earlier chapters of *Posterior Analytics* 1. In T3.13, Aristotle begins with an initial description of knowledge put in terms of something we all (supposedly) suppose about it: that what we know cannot be otherwise. Aristotle then swiftly draws two conclusions: what we know must be necessary and thus eternal (as he does at length in *Posterior Analytics* 1.4-6 and 1.8). After adding a few more details about knowledge, teachability, learnability, and induction (omitted above for sake of brevity), Aristotle concludes that knowledge is therefore (ἄρα) a demonstrative state, with the other features specified in the *Analytics*. Thus, starting with an initial characterisation of knowledge (that knowledge is of what cannot be otherwise), Aristotle argues for the details of what this amounts to (that what we know is necessary and thus eternal), and finally gives his definition:

knowledge is a demonstrative state. Similarly, *Posterior Analytics* 1.2 opens with a supposedly common thought about knowledge – that when we know something without qualification, we know that it cannot be otherwise and its cause – before proposing that one way of knowing is through demonstrations:

T3.12   And so if there is also one other way of knowing, we shall say later, but here we declare that we know through demonstrations. And by a demonstration I mean a deduction "capable of knowledge"; and by [a deduction] "capable of knowledge" I mean, concerning which, by means of possessing it we know. Accordingly, if knowing is such as we have posited it [to be], then demonstrative knowledge must necessarily be from [things] that are true, primary, immediate, better known, prior, and causal of the conclusion; for in this way the principles will also be appropriate to what is being proved. For there will be a deduction even without these things, but there will not be a demonstration; for it will not produce knowledge. (*APo* 1.2: 71b16-25)

Εἰ μὲν οὖν καὶ ἕτερος ἔστι τοῦ ἐπίστασθαι τρόπος, ὕστερον ἐροῦμεν, φαμὲν δὲ καὶ δι' ἀποδείξεως εἰδέναι. ἀπόδειξιν δὲ λέγω συλλογισμὸν ἐπιστημονικόν· ἐπιστημονικὸν δὲ λέγω καθ' ὃν τῷ ἔχειν αὐτὸν ἐπιστάμεθα. εἰ τοίνυν ἐστὶ τὸ ἐπίστασθαι οἷον ἔθεμεν, ἀνάγκη καὶ τὴν ἀποδεικτικὴν ἐπιστήμην ἐξ ἀληθῶν τ' εἶναι καὶ πρώτων καὶ ἀμέσων καὶ γνωριμωτέρων καὶ προτέρων καὶ αἰτίων τοῦ συμπεράσματος· οὕτω γὰρ ἔσονται καὶ αἱ ἀρχαὶ οἰκεῖαι τοῦ δεικνυμένου. συλλογισμὸς μὲν γὰρ ἔσται καὶ ἄνευ τούτων, ἀπόδειξις δ' οὐκ ἔσται· οὐ γὰρ ποιήσει ἐπιστήμην.

In this passage, Aristotle makes a subtle shift from talk of what we think about knowledge (in T1.1) to talk of what we *declare* about knowledge. This, I take it, marks Aristotle's novel proposal, i.e. that we achieve without qualification knowledge through demonstrations. And it is markedly similar to Aristotle's eventual definition of knowledge in *Nicomachean Ethics* 6.3: that knowledge is a demonstrative state with the additional details specified in the *Analytics*, i.e. that in order for a deduction to be a demonstration, and so productive of knowledge, it must be based upon principles that are appropriate because they are true, primary, immediate, better known, prior, and causal of the conclusion, and that we must also be convinced of the principles in a certain way (*APo* 1.2: 72a25-b4).

In both *Posterior Analytics* 1.2 and *Nicomachean Ethics* 6.3, then, Aristotle begins his account of knowledge with something that we all suppose to be true of knowledge, or about what we think when we think that we know. And, in both cases, Aristotle infers the demonstrative nature of knowledge from this starting point: in *Nicomachean Ethics* 6.3 (T3.13) he concludes that knowledge is therefore (ἄρα) a demonstrative state; and in *Posterior Analytics* 1.2 (T3.14) he infers that 'if knowing is such as we have posited it' (i.e. concerned with causes and what cannot be otherwise), then it must be possessed through demonstrations which are deductions based on appropriate principles. Given these similarities, we should not suppose that T1.1 is Aristotle's definition of without qualification knowledge. Instead, Aristotle's definition is that knowledge isdef a demonstrative state, as offered in *Nicomachean Ethics* 6.3.[135] Although Aristotle does not use this particular formulation in the *Posterior Analytics*, there is good reason to think that it lurks beneath the text. The *Posterior Analytics* argues at great length that we do indeed know by means of demonstrations, i.e. that knowledge is demonstrative. And Aristotle later refers to both ἐπιστήμη and νοῦς as states (ἕξεις):

T3.13 […] of the intellectual states by means of which we grasp truth, some are always true and others admit of falsehood, e.g. opinion and calculation, but knowledge and intellect are always true (*APo* 2.19: 100b5-8)[136]

---

[135] That knowledge isdef a demonstrative state might be either just one or part of Aristotle's eventual definition of without qualification knowledge. As Aristotle suggests in T3.12, there might be another way of knowing without qualification. This other way is plausibly understood to be a non-demonstrative grasp of first principles, i.e. intellect (νοῦς) (*APo* 1.3: 71b18-22, 2.19). If so, a definition of the essential nature of without qualification knowledge might include that knowledge is a demonstrative state accompanied by or grounded upon a non-demonstrative grasp of first principles (or something to this effect). Alternatively, Aristotle's account of without qualification knowledge might yield two definitions, one of ἐπιστήμη and the other of νοῦς. However, what's of primary importance for my purposes is that "demonstrative state" enters into the definition of (or is a definition of) without qualification knowledge.

[136] See also *EN* 6.2: 1139b12-13, 6.3: 1139b15-17.

[…] τῶν περὶ τὴν διάνοιαν ἕξεων αἷς ἀληθεύομεν αἱ μὲν ἀεὶ ἀληθεῖς εἰσιν, αἱ δὲ ἐπιδέχονται τὸ ψεῦδος, οἷον δόξα καὶ λογισμός, ἀληθῆ δ' ἀεὶ ἐπιστήμη καὶ νοῦς

It is thus a short step to the thought that Aristotle also conceived of knowledge as a demonstrative state in the *Posterior Analytics*. What's more, this definition fits well with Aristotle's own taxonomy of definitions. If knowledge is$_{def}$ a demonstrative state, then Aristotle's definition of knowledge is an example of his first type of definition: an indemonstrable positing of the nature of a subject kind, stating its genus (that knowledge is a *state*) and its differentia (that it is a *demonstrative* state).

But what, then, is the status of Aristotle's characterisation of knowledge in T1.1? If we are to imagine that Aristotle practised what he preached, then we might expect T1.1 to be a preliminary account of knowledge, i.e. a description of knowledge that captures something of knowledge itself but is not yet a definition that can be used to explain knowledge and its demonstrable attributes. This, indeed, would help to make sense of the argumentative structure of both *Posterior Analytics* 1.2 and *Nicomachean Ethics* 6.3: both begin with a preliminary account of knowledge and later state what knowledge is, thus mirroring Aristotle's own description of the path of inquiry towards definitions.

It might be objected, however, that T1.1 can't be a preliminary account because it does not characterise knowledge with the τις construction typical of preliminary accounts. By my hypothesis, a more suitable preliminary account of knowledge might be that knowledge is a certain state (ἡ ἐπιστήμη ἐστὶν τις ἕξις). Be that as it may, we still have good reason to read T1.1 as a preliminary account. First, immediately after his initial account of what we think when we think that we know in T1.1, Aristotle concludes that 'knowing is something of this sort' (τοιοῦτόν τι τὸ ἐπίστασθαί ἐστι, *APo* 1.2: 71b13, T1.1). Aristotle thus frames his account in indefinite terms, even though he does not use his usual τις construction. Second, whilst all preliminary accounts must capture something of the thing itself, it's not clear that they must adhere strictly to the τις construction detailed above. For example, *Posterior Analytics* 2.8 describes an account of eclipse in terms of the moon

not being able to produce a shadow (e.g. of a person) even though there is nothing between the moon and that person (93a37-b3):

> [A] Eclipse belongs to [B] inability to produce shadows;
>
> [B] Inability to produce shadows belongs to [C] moon;
>
> Therefore: [A] Eclipse belongs to [C] moon.

With this (non-demonstrative) deduction, Aristotle tells us that we grasp something of what eclipse is (93a29), but fail to do so through the explanatory middle term (93a36), i.e. screening by the earth.[137] Consequently, we know that it is eclipsed but not why, because we do not yet know what eclipse is.[138] Crucially, in this case we grasp something of what eclipse is and we know that it is eclipsed. This makes for a prime example of a preliminary account: a non-accidental grasp of the fact that eclipses exists, from which we can inquire into the explanatory middle term and so the definition that explains why it is eclipsed (93b3-7). Notably, however, Aristotle does not make use of the τις construction in this case. Instead, he cites a property of eclipses: that when the moon is eclipsed it is unable to produce shadows. This

---

[137] Reading διὰ μέσων with most manuscripts, in place of the OCT's δι' ἀμέσων (93a36).

[138] For this we would need the following demonstration, which proceeds through the appropriate middle term (93a30-31):

> [A] Eclipse belongs to [B] screening by the earth;
> [B] Screening by the earth belongs to [C] moon;
> Therefore: [A] Eclipse belongs to [C] moon.

Through this demonstration we discover both that it is eclipsed and why (93a35-36). Alternatively:

> [A] Privation of light belongs to [B] screening by the earth;
> [B] Screening by the earth belongs to [C] moon;
> Therefore: [A] Privation of light belongs to [C] moon.

This yields a continuous demonstration and thus a definition of Aristotle's second type: Eclipse is$_{def}$ [A] privation of light of [C] moon by [B] screening by earth.

property will not occur in the definition of eclipse but is a demonstrable attribute that can be explained by means of the definition of eclipses (i.e. because eclipses are a screening of the moon by the earth).[139] Some preliminary accounts, then, do not make use of Aristotle's τις construction, but instead provide us with a non-accidental grasp of the existence of the *definiendum* by stating one of its demonstrable attributes.

But we might think that T1.1 does just this: by capturing a demonstrable attribute of knowledge, it grasps something of what knowledge is. On this reading, T1.1 would be a preliminary account of knowledge from which we can inquire into the definition of knowledge. And the demonstrable attributes in T1.1 could themselves be demonstrated:

[A] Causal knowledge of necessities belongs to [B] demonstrative state;

[B] Demonstrative state belongs to [C] without qualification knowledge;

Therefore: [A] Causal knowledge of necessities belongs to [C] without qualification knowledge.

To this it might be objected that it's not obvious how the fact that without qualification knowledge is a demonstrative state, explains that causal knowledge necessities belongs to without qualification knowledge. Indeed, this is much less clear than the thought that the moon is incapable of producing shadows because the earth screens it. But not all demonstrations need be obvious from the demonstration alone. Consider again the following demonstration:

[A] 2R belongs to [B] closed, three-sided, rectilinear figure;

[B] Closed, three-sided, rectilinear figure belongs to [C] triangle;

Therefore: [A] 2R belongs to [C] triangle.

It's not clear from this demonstration alone that having 2R belongs to closed, three-sided, rectilinear figures. Indeed, a proof is necessary to see that this is so, such as

---

[139] Pellegrin 2010: 139-140.

that provided in Euclid's *Elements* (Book I, Proposition 32). This proof involves constructing a triangle (*ABC*, below) with one of its sides (*BC*) extended (to *D*) and an additional line (*CE*) that is parallel to one side of the non-extended sides (*AB*):
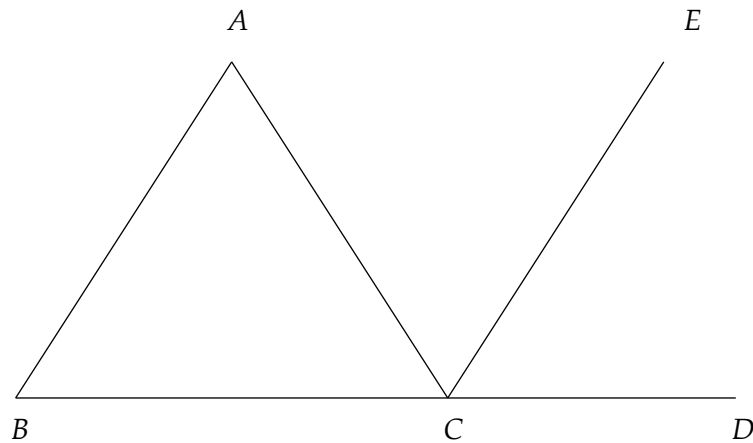
The proof shows that the sum of the internal angles of the triangle *ABC* (i.e. ∠ABC + ∠BCA + ∠CAB) is equal to the sum of the angles around the straight line, BCD, which is in turn equal to the sum of two right angles because BCD is a straight line (i.e. ∠BCD = ∠BCA + ∠ACE + ∠ECD = 180°). The proof achieves this by showing that ∠ABC = ∠ECD and ∠CAB = ∠ACE. Consequently, not only is a proof required to see that triangles have 2R, but this proof depends upon other theorems that also stand in need of proof, e.g. further facts about the angles produced when one straight line cuts across two parallel lines (Book I, Proposition 29). And these theorems also depend on earlier theorems, definitions, and postulates. Consequently, seeing that having 2R is a necessary consequence of being a three-sided, rectilinear, plane figure requires a complex web of background knowledge (e.g. facts about the angles subtended by parallel lines) and abilities (e.g. to grasp the force of the Euclidean proof).[140]

Similarly, then, a demonstration that shows that knowledge, because it is a demonstrative state, is of causes and of what cannot be otherwise, need not be obvious on its own. Aristotle can offer us further argument to show that the demonstrative nature of knowledge explains the fact that knowledge is of causes

---

[140] Aristotle suggests as much at *Met* 9.9: 1051a21-26.

and of what cannot be otherwise. And he attempts to do just that. In *Posterior Analytics* 1.2, Aristotle makes his declaration that we know by means of demonstrations (71b17, T3.12). He then immediately details the nature of the principles upon which demonstrations must be based in order for demonstrations to yield knowledge as described in T1.1 (71b19-72a5). And many of the following chapters are further concerned with the sense in which deductions must be demonstrative, if they are to produce knowledge as described in T1.1. For instance, since knowledge is of necessities (1.4: 73a21-24, cf. 1.6: 74b5-12; 1.9): (i) demonstrations must involve universal belongings in which a predicate belongs to its subject in itself (1.4: 73b16-18); (ii) demonstrations must involve subjects and predicates that belong primitively and of any chance case (1.5: 74a32-b4); (iii) principles of demonstrations must be primitive in kind with the subject of the demonstration (1.6: 74b21-26, cf. 1.9: 76a26-30). And since knowledge is of causes: (iv) we must distinguish demonstrations of the fact from demonstrations of the reason why (1.13: 78a22-28); (v) we must demonstrate by means of all four types of cause (2.11: 94a20-24). With all this in mind, and supposing that Aristotle is correct, we might come to know that knowledge being essentially a demonstrative state (and demonstrative in Aristotle's particular sense) explains the fact that when we know something without qualification, we know its cause and that it cannot be otherwise.

In sum, I have argued that T1.1 is not Aristotle's definition of the essential nature of knowledge, but rather a preliminary account of knowledge that grasps something of what knowing is. This preliminary account establishes that there is knowledge and is an appropriate starting-point for an inquiry into what knowledge is, i.e. the topic that concerns much of the *Posterior Analytics*. Aristotle's considered definition of the essential nature of knowledge is instead that knowledge is_def a demonstrative state. What distinguishes this definition from the preliminary account of T1.1, is that Aristotle's definition of knowledge must be explanatory of knowledge and its demonstrable attributes. This definition of without qualification knowledge will form the backbone of Aristotle's account of the value of knowing without qualification. On this view, the value of knowing without qualification is to

be explained by the fact that knowledge is not only a demonstrative state of the soul, but a *virtuous* state of the soul.

3.4. Conclusion

In this chapter, I have argued that the sophistic way of knowing presents a substantive view about the nature and value of knowledge: that the sole value of any and all knowledge (or epistemic state) is instrumental on the value of making money by appearing wise; and that to know is to have knowledge. The sophist contends that the best epistemic condition is one that ensures that they appear wise even though they are not. The sophistic knower thus presents a challenge to Aristotle's epistemic ideal: given that knowing without qualification is typically unnecessary for making money by appearing wise, we have no reason to strive for this superlative epistemic condition. I also argued that Aristotle is at odds with the sophistic way of knowing: not only does he think that we ought to strive for without qualification knowledge, he considers the sophist's way of assuming first principles and their account of knowledge to be naïve. For Aristotle, knowledge is not merely something that we have, but something that is had in a very particular way, i.e. as a demonstrative state of the soul. This account of knowledge will form the backbone of Aristotle's account of the value knowledge and thus provides the framework with which to meet the sophist's challenge. In Part II of this thesis, I argue that knowledge is valuable because it is a state of the soul and, in particular, a virtuous state of the soul. And we ought to strive for Aristotle's epistemic ideal because such knowledge is of value.

PART II. The value of theoretical wisdom as a virtue of thought

4. A value problem for Aristotle's account of theoretical wisdom

4.1. Introduction

In Part I of this thesis, I argued for three principal claims about Aristotle's epistemic project in the *Posterior Analytics*. First, that Aristotle's description of without qualification knowledge in T1.1 is an account of an epistemic ideal. This account has two aspects: it is descriptive in so far as it describes what it would be to be most knowing, i.e. to know the most knowable objects and know them in the most knowable way; and it is prescriptive in so far as it implies that we have reason to strive for it (Chapter 1). Second, that Aristotle has grounds for the descriptive aspect of his epistemic ideal: knowledge characteristically requires some form of rational conviction, such that being most knowing requires grasping objects that afford maximal rational conviction *with* maximal rational conviction. On Aristotle's view, we achieve this when we know necessary truths by means of their causal explanations and we know them as such (Chapter 2). Third, that Aristotle's account of the sophistic way of knowing presents a direct challenge to the prescriptive aspect of Aristotle's epistemic ideal. The sophistic knower represents a substantive view about the value of knowledge, according to which the sole value of any and all knowledge (or epistemic state) is instrumental on the value of making money through the appearance of wisdom. Given that knowing without qualification is typically unnecessary to make money through the appearance of wisdom, we have (by the sophist's lights) no reason to strive for Aristotle's epistemic ideal. I further argued that Aristotle sets out to meet this challenge by taking issue with the sophist's account of the nature of knowledge. The sophist's claim that to know is to have knowledge, but having is ambiguous. Aristotle claims knowledge is had in a very particular sense: not *qua* possession but *qua* state of the soul (Chapter 3).

In Part II of this thesis, I offer an account of how Aristotle uses this conception of knowledge in order to account for the value of his epistemic ideal. I argue that Aristotle's explanation of the value of knowledge is grounded on the thought that knowledge is not only a state of the soul, but a *virtuous* state of the

soul. This requires something of a change of focus: Aristotle's account of intellectual virtue occurs not in the *Posterior Analytics* but in the *Nicomachean Ethics*. There, Aristotle treats demonstrative knowledge (ἐπιστήμη) and non-demonstrative knowledge of the first principles of demonstrations (νοῦς) as constitutive parts of the intellectual virtue of theoretical wisdom (σοφία) (*EN* 6.7: 1141a17-20, b2-3). I therefore provide an account of the value of theoretical wisdom as a virtuous state of the soul, where ἐπιστήμη and νοῦς are of constitutive value with respect to theoretical wisdom. On this view, the value of Aristotle's epistemic ideal is to be explained in light of the fact that without qualification knowledge is a constitutive part of theoretical intellectual virtue.

On the account that I develop, theoretical wisdom is of value because it is an epistemic virtue. The challenge, however, is to explain in what sense theoretical wisdom is valuable because it is an epistemic virtue. In this chapter, I explore this challenge through the lens of Plato's value problem in the *Meno*. There, Plato asks: why is knowledge more valuable than true opinion? Of Aristotle, I ask: why is theoretical wisdom more valuable than true opinion? Or more generally: why is theoretical wisdom more valuable than any other non-virtuous but nonetheless factive epistemic state that is of the very same truths as theoretical wisdom?[141] I focus on Aristotle's account of theoretical wisdom in *Nicomachean Ethics* 6 as an intellectual virtue or virtue of thought (διανοητικόν).[142] In brief, Aristotle's argument for the value of theoretical wisdom runs as follows:

(1) Theoretical wisdom is a virtuous epistemic state because it grasps theoretical truth *most of all* or *well*;

(2) A virtuous epistemic state is better and more valuable than non-virtuous states that have a *mere* grasp of the same truths;

---

[141] I offer this general formulation because Aristotle apparently denies that ἀλαθής δόξα and ἐπιστήμη can be of the very same objects (*APo* 1.33). I address this concern in §4.4.3.

[142] I use these two terms interchangeably.

(3) Therefore: Theoretical wisdom is better and more valuable than non-virtuous states that have a *mere* grasp theoretical truth.

Accordingly, the additional value of theoretical wisdom is to be found in the fact that it is the state in virtue of which a knower grasps theoretical truth most of all or well. It's unclear, however, what distinguishes the mere grasp of theoretical truth from the manner in which theoretical wisdom grasps theoretical truth most of all or well *such that theoretical wisdom is of greater value*. Aristotle must provide an account of this distinction that explains and so vindicates the claim that theoretical wisdom is indeed better and more valuable than non-virtuous but factive epistemic states concerned with the same truths. If no such account is forthcoming, we should conclude that theoretical wisdom is in fact of no additional value. Accounting for theoretical wisdom's good grasp of truth will occupy the remaining chapters of this thesis.

Plato's value problem shares instrumentalist assumptions with the sophistic challenge to Aristotle's epistemic ideal. Just as the sophistic knower supposes that the sole value of any and all epistemic states is instrumental on the value of making money through the appearance of wisdom, Plato's value problem assumes that the sole value of any and all epistemic states is instrumental on the value of truth (particularly for the sake of correct action). However, Plato's value problem applies additional pressure: one might respond to the sophist's challenge with the thought that truth has value that isn't instrumental on the value of appearing wise, and that knowing is valuable because we access truth by means of it. Plato's value problem accepts this – truth *is* of value – but nonetheless claims that knowledge is of no greater value than true opinion. If truth is the sole bearer of epistemic value, then why should we strive for knowledge over and above mere *true* opinion? I argue that the same worry applies to Aristotle's account of theoretical wisdom. Aristotle appears to commit to the thought that truth is the sole bearer of theoretical epistemic value: the doing-well of the knowledgeable part of the soul is truth and truth alone. Given this, why should we strive for theoretical wisdom over and above lesser (i.e. non-virtuous) epistemic states that have a merely true (but

nonetheless true) grasp of the very same truths as theoretical wisdom? In order to account for the value of theoretical wisdom, Aristotle must offer an account of theoretical wisdom's particular relation to truth, i.e. the sense in which it grasps truth most of all or well.

I first offer an account of Plato's value problem in the *Meno* in order to make clear the presuppositions that motivate it and explain how it is in principle applicable to Aristotle's account of theoretical wisdom (§4.2). I then apply Plato's value problem to Aristotle's account of theoretical wisdom in *Nicomachean Ethics* 6 (§4.3) before detailing four insufficient responses to it (§4.4). In conclusion, I propose an alternative account of the sense in which theoretical wisdom grasps truth *well*, which I continue to motivate and develop as a response to Plato's value problem over the remaining chapters of this thesis.

4.2. The value of knowledge in Plato's *Meno*

In the *Meno*, Plato has Socrates propose that true opinion is perhaps no less beneficial than knowledge, at least when it comes to action (97a6-c5).[143] True opinion, in so far as it is true, will guide and complete our actions just as well as knowledge. Socrates offers a now well-rehearsed example: someone who knows the road to Larissa will guide others successfully to their destination. Nonetheless, someone who merely has a true opinion about which is the road will guide others just as well, all other things being equal, even though they do not know the way and have never been. The true opiner will succeed simply in virtue of the fact that their opinion is true.[144]

---

[143] Socrates speaks of both correct opinion (ὀρθή δόξα) and true opinion (ἀλαθής δόξα), as well as opining truly and opining correctly. I treat these as equivalent. Similarly, Socrates speaks of knowledge (ἐπιστήμη), knowing (οἶδα), and practical wisdom (φρόνησις). I also treat these as equivalent.

[144] Socrates' inference that if someone knows or has a true opinion about the way to Larissa, then they will act successfully, requires a *ceteris paribus* clause. All manner of obstructions may hinder them. However, I typically omit it for sake of brevity.

Since true opinion and knowledge are equally successful guides to action, Socrates concludes that true opinion is no less beneficial than knowledge:

T4.1   {Socrates} Then correct opinion is not at all less beneficial than knowledge?

{Meno} Yes, to this extent, Socrates. But the person who has knowledge will always hit the mark, whereas the person who has correct opinion will sometimes happen to and sometimes not.

{Socrates} How do you mean? The person who always has correct opinion, won't they always succeed, just as long as they opine correctly?

{Meno} It appears to me to be necessary; but then I wonder, Socrates, this being the case, why on earth knowledge is much more valued than correct opinion, and why one is different from the other. (*Meno*: 97c4-d3)

{ΣΩ.} Οὐδὲν ἄρα ἧττον ὠφέλιμόν ἐστιν ὀρθὴ δόξα ἐπιστήμης.

{ΜΕΝ.} Τοσούτῳ γε, ὦ Σώκρατες, ὅτι ὁ μὲν τὴν ἐπιστήμην ἔχων ἀεὶ ἂν ἐπιτυγχάνοι, ὁ δὲ τὴν ὀρθὴν δόξαν τοτὲ μὲν ἂν τυγχάνοι, τοτὲ δ' οὔ.

{ΣΩ.} Πῶς λέγεις; ὁ ἀεὶ ἔχων ὀρθὴν δόξαν οὐκ ἀεὶ ἂν τυγχάνοι, ἕωσπερ ὀρθὰ δοξάζοι;

{ΜΕΝ.} Ἀνάγκη μοι φαίνεται· ὥστε θαυμάζω, ὦ Σώκρατες, τούτου οὕτως ἔχοντος, ὅτι δή ποτε πολὺ τιμιωτέρα ἡ ἐπιστήμη τῆς ὀρθῆς δόξης, καὶ δι' ὅτι τὸ μὲν ἕτερον, τὸ δὲ ἕτερόν ἐστιν αὐτῶν.

Meno's first question has come to be known as the primary value problem.[145] In the following, I refer to it as Plato's value problem. It comes together with a second question: how are knowledge and opinion different? That Meno asks these questions together is testimony that he grasps the puzzle at hand. Socrates' example of the road to Larissa suggests that the value of knowledge is exhausted by the value of truth: something that knowledge and true opinion have in common. In order to vindicate the idea that knowledge is more valuable than true opinion – and, indeed, that it is much more valuable – it is at least necessary to identify a feature of knowledge that adds value to knowledge, and which isn't also shared by true opinion (in the relevant, value-adding sense).

In §4.3, I argue that Aristotle's account of theoretical wisdom in the *Nicomachean Ethics* faces a version of Plato's value problem. But before turning to

---

[145] Pritchard 2010: 5-8.

Aristotle, I explore Plato's value problem further, in order to explain how it is in principle applicable to Aristotle's account of theoretical wisdom and to get clear on the nature of the problem that I claim Aristotle faces.

4.2.1. The multiplicity of Plato's value problem

It's first important to note that Plato's value problem is multipliable with respect to epistemic states. The core intuition behind the problem is that, if knowledge is valuable primarily in virtue of the fact that it is true, then any other factive epistemic state that has access to the same truths is at least of equal value. This worry applies not only to knowledge but also to any epistemic state that is *prima facie* valuable primarily for its truth. For instance, if understanding is valuable primarily in virtue of the fact that it is true, then we may ask whether understanding is more valuable than true opinion of the same truths (or, even, whether understanding is more valuable than knowledge of the same truths). Similarly, if wisdom is valuable primarily in virtue of its being true, then we may question whether wisdom is more valuable than any other purportedly less valuable but nonetheless factive epistemic state of the same truths. Such puzzles are motivated by *truth value monism*: the thought that truth is the sole bearer of final epistemic value.[146] That is to say, epistemic states such as true opinion, knowledge, understanding, wisdom, etc., are epistemically valuable solely in virtue of the fact that each affords us access to truth. Consequently, each of these states, as well as any truth-conducive feature that they might involve (e.g. justification, warrant, reasons, explanations, etc.), only have epistemic value that is instrumental on the value of truth. In §4.3, I argue that Aristotle is committed to truth-value monism – at least in relation to the relative value of epistemic states concerned with theoretical truth. I also exploit the fact that Plato's value problem is multipliable with respect to epistemic states in order to ask why theoretical wisdom is more valuable than true opinion (or any other purportedly less valuable, factive epistemic state concerned with theoretical truth).

---

[146] See DePaul 2001, Sosa 2003, Zagzebski 2004, Pritchard 2010.

4.2.2. The generality of Plato's value problem

It's also important to note the generality of Plato's value problem, in so far as it is not limited to the domain of *epistemic* value – or, for that matter, any other particular domain of value. In order to see this, it's first worth considering how distinctions between domains of value might be drawn. Epistemic value is often understood as just one type or domain of value among many, including moral value, aesthetic value, prudential value, religious value, etc. The motivating thought here is that something may possess epistemic value but either lack value or be of negative value with respect to another domain. For example, suppose that I am seriously ill and that my believing that I am seriously ill will significantly worsen my chances of survival, e.g. as a consequence of stress.[147] Supposing that truth is of epistemic value, then it may be valuable from an epistemic point of view that my belief about whether I'm suffering from a serious illness is true. Supposing also that staying alive is of prudential value, then it may be bad from a prudential point of view for my belief to be true. In this sense, we can distinguish between value relative to different domains. And we can also distinguish domain-relative value from all things considered value, which weighs and evaluates across domains of value in order to judge whether it is good for me to believe the truth, all things considered.

Given these distinctions, we might limit a discussion of Plato's value problem to a consideration of the *epistemic* value of knowledge over true opinion. Indeed, the so-called Meno problem is almost ubiquitous in debates about the value of knowledge in the contemporary, Anglophone, epistemology literature – debates that are often, though not exclusively, focused on the epistemic value of knowledge.[148] But puzzles that are directed specifically towards the epistemic value of knowledge need not foreclose responses that claim knowledge to be of greater value either in some other domain or all things considered. Take, for example, the

---

[147] See Côté-Bouchard 2017: 410.

[148] See Kvanvig 2003, Olsson 2011. Cf. Pritchard 2011: 250.

swamping problem, which is often posed as a puzzle pertaining specifically to the epistemic value of knowledge.[149] The swamping problem is used to show the inconsistency of two claims: (i) truth value monism, i.e. that truth or true belief is the sole bearer of final epistemic value, such that all other epistemic value is instrumental on truth; and (ii) that knowledge is of greater epistemic value than mere true belief.[150] In response to the swamping problem, some authors abandon (ii).[151] But even if we were to conclude that knowledge is of no greater *epistemic* value than mere true belief, we may still ask whether knowledge is of greater value either with respect to a different value-domain or all things considered.

Given this, how should we interpret the value problem in the mouths of Socrates and Meno? It is raised in the context of a discussion about what makes people virtuous and good. If someone is good then they are beneficial, and those who are beneficial are able to guide others correctly (*Meno*: 97e7-a4). But, so Socrates claims, good guidance does not require knowledge: someone with true

---

[149] That said, the principles that underpin the swamping problem are not domain-specific and may plausibly be applied to different domains of value or all things considered.

[150] A version of the swamping problem is first raised in Zagzebski 2000 & 2003, though not described as such. It depends upon a general principle about value: 'If the value of a property possessed by an item is only instrumental value relative to a further good and that good is already present in that item, then it can confer no additional value' (Pritchard 2011: 248, cf. Dutant 2014: 358-361). If rich flavour is the sole bearer of final value for a cup of coffee, then the fact that a cup of coffee is produced by a coffee machine that reliably produces rich coffee is only instrumentally valuable on the richness of flavour of the coffee it produces. Accordingly, if a cup of coffee is already rich in flavour, then the fact that it was produced by a reliable coffee machine adds no value to that cup of coffee. Indeed, presented with two cups of coffee which are equally rich in flavour, it should be of no consequence that one was produced by a reliable coffee machine and the other not. The swamping problem applies this thought to knowledge: if truth is the sole bearer of final epistemic value, then *whatever* distinguishes knowledge from mere true belief (be it justification, warrant, a reliable belief forming process, etc.) will only be of instrumental epistemic value, for the sake of truth. And because knowledge already possesses the good of truth, *whatever* distinguishes knowledge from mere true belief will confer no additional value upon knowledge. Otherwise put, the value of truth (or true belief) swamps the value of knowledge, such that knowledge is of no greater epistemic value than true belief.

[151] E.g. Dutant 2014.

opinion will be just as good a guide as someone who knows. Perhaps, then, knowledge is not necessary for being virtuous and good (97a6-7, cf. 98c8-9). Consequently, it seems clear that Plato's value problem is not concerned solely with the epistemic value of knowledge. Rather, Meno's puzzlement is motivated by the thought that knowledge and true opinion are apparently of equal *practical* value, i.e. when it comes to acting well and correctly. But we should not conclude, either, that Plato's value problem is concerned solely with the practical value of knowledge. Despite being raised in the context of a discussion of virtue, Meno's question does not demand an answer that is peculiarly practical. After all, an interlocutor may either (i) argue that knowledge does in fact have practical advantages over mere true opinion; (ii) conclude that knowledge and mere true opinion are of equal value; or (iii) argue that knowledge has some non-practical value that mere true opinion lacks.[152] That Meno's question is motivated by worries about the practical value of knowledge doesn't therefore demand a practical answer.[153] This is reflected in Meno's question which asks, quite generally: why is knowledge much more valued than true opinion? An answer to this general question may draw upon concerns that are peculiarly epistemic, practical, prudential, or otherwise, or it may even be answered from an all things considered perspective.

Two points are particularly important for my current purposes. First, Plato's value problem can be motivated and asked from any perspective from which truth is *prima facie* the sole bearer of final value. If truth is *prima facie* the sole bearer of practical value, then knowledge and true opinion may be of equal practical value. If truth is *prima facie* the sole bearer of prudential value, then knowledge and true opinion may be of equal prudential value, etc. Second, Plato's value problem may be reasonably answered from different domains of value or all things considered. In these two senses, Plato's value problem is a general one.

---

[152] Following both Plato and Aristotle I do not consider (ii). For some contemporary examples, see Sartwell 1992, Kvanvig 2003, Baehr 2009, Pritchard 2010, Dutant 2014.

[153] This is independent of whether Socrates' answer to the value problem in the *Meno* draws upon concerns that are peculiarly practical, prudential, epistemic, or otherwise: the problem, as posed, is a problem not only for Socrates to answer.

I maintain the generality of Plato's value problem when applying it to Aristotle. Aristotle's description of theoretical wisdom as a virtue of thought occurs in the *Nicomcahean Ethics*, which is explicitly concerned with the human good, and with making us better agents over and above making us better knowers (*EN* 1.3: 1095a5, 2.6: 1103b26-29, 10.9: 1179b1, cf. *EE* 1.5: 1216b21-25). We might then suppose that a value problem concerned with the virtue of theoretical wisdom should primarily be concerned with its prudential value. This is in spite of the fact that theoretical wisdom is purportedly useless (*EN* 6.7: 1141b6-8) and in no way concerned with the human good achievable in action (*EN* 6.12: 1143b18-20). Aristotle argues that in order to achieve complete or perfect happiness we must be theoretically wise, such that we are able to contemplate in accordance with theoretical wisdom (*EN* 10.7: 1177a12-18, 1177a24). In this sense we might expect a value problem for theoretical wisdom to address its purported prudential value, i.e. its value in relation to flourishing and well-being.

On the other hand, Aristotle is explicit that the goal of theoretical thought is truth, whereas the goal of practical thought is action (*Met* 2.1: 993b20-21). Similarly, the good state of theoretical thought is truth, whereas the good state of practical thought is truth in accordance with correct desire (*EN* 6.2: 1139a21-b5, cf. *DA* 3.10: 432b26-433a20). Consequently, Aristotle distinguishes sharply between practical and theoretical thought, and thus between practical and theoretical wisdom. Theoretical wisdom is the virtue of the part of the soul that contemplates beings whose principles do not admit of being otherwise (*EN* 6.1: 1139a6-11). Practical wisdom, on the other hand, is concerned with contingent matters that can be deliberated about (6.1: 1139a11-15, 6.5: 1140a31-b4, 6.11: 1143b14-17, 6.12: 1143b18-20). This, in turn, allows for a distinction between theoretical truth and practical truth. Whereas theoretical thought is concerned exclusively with necessary truths, practical thought is focused on contingent truths about the practicable human good (6.5: 1140b4-11, 6.7: 1141b2-14, cf. 6.2: 1139a21-31).[154] In this sense, we might also

---

[154] For discussion of the differences and similarities between practical and theoretical thought, see Allen 2015 and Charles 2015.

expect a value problem for theoretical wisdom to address its purported epistemic value, i.e. its value in relation to knowing necessary, theoretical truths.

In tune with the generality of Plato's value problem, I ask a general question of Aristotle: why is theoretical wisdom more valuable than true opinion? Or: why is theoretical wisdom more valuable than any other non-virtuous but nonetheless factive epistemic state of the same truths? As such, I do not limit Aristotle's account of the value of theoretical wisdom by presupposing that it should be answered from a particular domain of value. In Chapter 6, I argue for the unique value of theoretical wisdom in relation to happiness in *Nicomchean Ethics* 10.7-8. In Chapter 7, I argue that theoretical wisdom also has value in virtue of its specific relation to theoretical truth. In this sense, Aristotle has more than one answer to Plato's value problem, when brought to bear on theoretical wisdom. And a plurality of responses is in part encouraged by the generality of Plato's value problem.

4.2.3. Two versions of Plato's value problem

Before turning to the *Nicomachean Ethics*, it's also important to note that the value problem posed in the *Meno* is open to two different readings, resulting in two different versions of Plato's value problem: one harder, the other easier. I here distinguish between these two versions and argue that it's unclear which Plato has in mind. As such, it's unclear which version we should bring to bear on the *Nicomachean Ethics*. I later propose that by pushing Aristotle to answer the hard version of the value problem, we arrive at a richer picture of theoretical wisdom and its value.

The two different versions of Plato's value problem stem from an ambiguity in T4.1, where Socrates appears to correct Meno about the successful action of the true opiner:[155]

---

[155] In the following I rely heavily on Joseph Bjelde's reasoning concerning the ambiguity of Socrates' question (Bjelde unpublished mss: 4 n.9).

{ΣΩ.} Πῶς λέγεις; ὁ ἀεὶ ἔχων ὀρθὴν δόξαν οὐκ ἀεὶ ἂν τυγχάνοι, ἕωσπερ ὀρθὰ δοξάζοι; (97c9-10)

On the one hand, Socrates may be describing someone who *currently* has a true opinion about the road to Larissa, and thus compares the current true opiner with someone who currently knows the road to Larissa. Call this the *current true opinion* reading (CTO). For CTO, ἀεί in ὁ ἀεὶ ἔχων has wide scope, with the second ἀεί following suit:

> {Socrates} How do you mean? *Always*, the person who has correct opinion, *always*, won't they succeed, just as long as they opine correctly?

On the other hand, Socrates may be describing someone who *persistently* has a true opinion, and thus compares the persistent true opiner with someone who knows the road to Larissa. Call this the *persistent true opinion* reading (PTO). For PTO, ἀεί is read as having narrow scope in both cases:

> {Socrates} How do you mean? The person who *always* has correct opinion, won't they *always* succeed, just as long as they opine correctly?

The difference is delicate but significant. According to CTO, Socrates compares someone who *now* opines truly with someone who *now* knows. And his point above is that the true opiner will act correctly for just as long as their opinion is true. Call this comparison between a current true-opiner and a knower the *easier value problem*. Indeed, CTO allows for a relatively straightforward solution to the value problem: current knowledge is of greater value than current true opinion because knowledge, unlike true opinion, is stable. In virtue of the stability of knowledge, our grasp of the truth is more likely to persist if we know than if we merely have a true opinion. This can be spelled out in different ways. For example, Miranda Fricker (2009) argues that knowledge is typically more resilient in the face of misleading counter-evidence than true opinion. This is because the knower typically has a superior grasp of the evidence. When faced with misleading counter-evidence on the road to

Larissa (e.g. a sign that falsely claims that the road leads to a different destination) the knower is in a better position to weigh this up with the evidence in their ken, such that they are more likely to maintain their grasp on the truth. The true opiner, on the other hand, typically has an inferior grasp of the evidence and so is more likely to renege on their opinion, in spite of its truth. Consequently, current knowledge increases the likelihood of future true belief, and so increases the likelihood of acting correctly. For this reason, current knowledge is of greater value than current true opinion.[156]

Socrates appears to suggest something along these lines. He replies to Meno's questions by comparing true opinions with the statues of Daedalus (*Meno*: 97c11-98b6). Perhaps because they were so lifelike, Daedalus' statues would run away unless someone had the good sense to tie them down. To acquire an untethered statue is not worth much, because it won't remain. But a tethered statue is of great value in virtue of its beauty. Similarly in the case of true opinions:

T4.2   {Socrates} For, also, true opinions, as long as they remain, are fine things and everything they produce is good; but they do not want to stay for much time, and they run away from the soul of humans, such that they are not worth much, until someone tethers them by accounting for the reason why. And this, Meno my friend, is recollection, as we previously agreed. Whenever they are tethered, first they become knowledge, and then steadfast; and this is why knowledge is of greater value than correct opinion, and knowledge differs from correct opinion in being tethered. (*Meno*: 97e6-98a8)

καὶ γὰρ αἱ δόξαι αἱ ἀληθεῖς, ὅσον μὲν ἂν χρόνον παραμένωσιν, καλὸν τὸ χρῆμα καὶ πάντ' ἀγαθὰ ἐργάζονται· πολὺν δὲ χρόνον οὐκ ἐθέλουσι παραμένειν, ἀλλὰ δραπετεύουσιν ἐκ τῆς ψυχῆς τοῦ ἀνθρώπου, ὥστε οὐ πολλοῦ ἄξιαί εἰσιν, ἕως ἄν τις αὐτὰς δήσῃ αἰτίας λογισμῷ. τοῦτο δ' ἐστίν, ὦ Μένων ἑταῖρε, ἀνάμνησις, ὡς ἐν τοῖς πρόσθεν ἡμῖν ὡμολόγηται. ἐπειδὰν δὲ δεθῶσιν, πρῶτον μὲν ἐπιστῆμαι γίγνονται, ἔπειτα μόνιμοι· καὶ διὰ ταῦτα δὴ τιμιώτερον ἐπιστήμη ὀρθῆς δόξης ἐστίν, καὶ διαφέρει δεσμῷ ἐπιστήμη ὀρθῆς δόξης.

---

[156] See also Williamson 2000: 78-80.

Socrates apparently explains the greater value of knowledge in virtue of the fact that knowledge, unlike true opinion, has been tied down. Our knowledge does not escape us, ensuring that we have a sustained or persistent grasp of the truth. According to this reading of Socrates' solution, knowledge is of greater value than true opinion because it is steadfast, which is in turn instrumental on the value of truth. But knowledge nonetheless surpasses true opinion in value because it ensures that we maintain our grip of the truth over time. In favour of CTO, then, is that Socrates' response is *prima facie* appropriate to the easier version of the value problem.

Nonetheless, there are problems for CTO. First, reading the first ἀεί as having wide scope renders Socrates' second ἀεί redundant. For Socrates' point it would suffice to say that, *always*, the person who opines correctly will act successfully, just as long as they opine correctly. Second, CTO struggles to make sense of Socrates and Meno's conversation. In response to Socrates' claim that true opinion and knowledge are equally beneficial (97b9-c5), Meno objects that the person who knows will always hit the mark, whereas the person with true opinion will sometimes succeed and sometimes fail (97c6-8). According to CTO, Socrates corrects Meno by making clear that the person who opines correctly will always act successfully, just as long as they opine correctly. We then have two options for interpreting Meno's initial complaint. Either Meno is suggesting that the true opiner will sometimes fail to act correctly *even when* their opinion is true. The problem with this is that Meno has only just assented to the idea that the true opiner will indeed act correctly while their opinion is true (97b5-8). And we are given no independent reason to suppose that Meno underwent a rapid change of mind. We are thus forced to read Meno uncharitably. Alternatively, we can interpret Meno as meaning to suggest, quite reasonably, that the person who currently opines truly will sometimes fail in the future, e.g. because they renege on their opinion. But, if so, then Socrates fails to see what Meno is getting at with his objection, to the extent that Socrates confusedly corrects Meno and then goes on to give the very same type of answer, albeit a clearer telling of it: that true opinion is only beneficial while it

persists. We are thus forced to read Socrates uncharitably.[157] Either way, we must read Meno or Socrates in an uncharitable light.

Given these difficulties we might prefer PTO. On this reading, Meno makes the reasonable suggestion that the current true opiner will, indeed, sometimes fail in the future. Socrates then responds with a more challenging case, comparing someone who *always* opines truly (and so will *always* act successfully) with someone who knows. Call this comparison between a persistent true opiner and a knower the *hard value problem*. PTO has the benefit of ensuring that Socrates' second ἀεί is not redundant. It also provides a charitable reading of Socrates and Meno's conversation: Meno makes a reasonable objection, to which Socrates responds with a more demanding puzzle.

But PTO is not without its troubles. In particular, Socrates' response to the value problem apparently calls upon the persistence of knowledge in order to explain its value. But persistence alone can't answer the hard value problem: persistent knowledge is of no greater value than persistent true opinion, because both have a persistent grasp of the truth. Proponents of PTO must find a different way of interpreting Socrates' answer to the value problem. One possibility points to the fact that Socrates insists that knowledge must be tethered by a very particular process: giving an account of the reason why. Accordingly, Socrates' account of the value of knowledge does not merely appeal to the fact that knowledge persists, but it persists in virtue of an explanatory tether. True opinion, on the other hand, may persist for all manner of epistemically undesirable reasons, e.g. dogmatism, blind faith, desperate hope, self-deception, etc. Socrates may then argue that grasping explanations has independent value, such that the value of knowledge is not exhausted by its mere persistence.[158] Rather, knowledge is of greater value than true-opinion because knowledge involves explanatory-persistence whereas true opinion does not. This could be spelled out in different ways. Perhaps grasping

---

[157] This reading is certainly not off the cards (Sharples 1985: 183). However, I merely intend to show that both CTO and PTO are plausible readings of the text. I do not intend to rule one or the other out.

[158] Scott (2006: 181) raises this possibility.

explanations has final value as a specific type of epistemic achievement. Or perhaps explanations are instrumentally valuable, outside of the sphere of correct action. However it's spelled out, what's important is that the value of grasping explanations is independent from (i.e. not instrumental on) the value of having a merely persistent grasp of the truth. Socrates will then be in a position to answer the hard value problem.[159]

I won't decide between CTO and PTO. Consequently, I won't decide whether Plato presents the hard value problem – comparing persistent true opinion with knowledge – or the easier value problem – comparing current true opinion with current knowledge. At this stage, it's just important to note that both versions of the value problem are possible readings of the text. In the next section, I argue that Aristotle's description of theoretical wisdom in *Nicomachean Ethics* 6 faces a version of Plato's value problem. I do not mean to suggest, however, that Aristotle is directly or explicitly engaged with the *Meno*.[160] Rather, I use Plato's value problem in order to challenge and explicate Aristotle's claim that theoretical wisdom is an intellectual virtue. I also claim that Aristotle has the resources to answer the hard value problem. By reading Aristotle's claims about theoretical wisdom in light of the hard value problem, I propose that we can make better sense of the value that Aristotle assigns to theoretical wisdom over other epistemic states.

---

[159] Defenders of CTO might respond that this is surely not what Socrates has in mind. In T4.2 Socrates is clear that knowledge is valuable because it persists, whereas true opinion does not. It's certainly true that Socrates distinguishes between mere persistence and explanatory persistence, but he's not claiming that explanations have independent value. Rather, explanations are necessary to ensure that knowledge in fact persists (Fine 2004: 72). I won't explore this issue further. What's important for my purposes is that both CTO and PTO are possible readings of the text.

[160] However, given the great attention that Plato's value problem has received in the contemporary Anglophone epistemological literature, it is somewhat remarkable that Aristotle nowhere engages with it explicitly in the extant *Corpus*.

4.3. A value problem for theoretical wisdom in the *Nicomachean Ethics*

In the following I present a sketch of Aristotle's argument in *Nicomachean Ethics* 6 as to why theoretical wisdom is an intellectual virtue. In so doing, there are a number of details that I either leave out or do not dwell on, such as Aristotle's argument in *Nicomachean Ethics* 6.7 for the identification of σοφία with theoretical wisdom. I return to these details in Chapter 7. For now, I present an overview of Aristotle's argument in order to show how Plato's value problem applies to Aristotle's account of theoretical wisdom as an intellectual virtue. Although not explicitly concerned with the value of theoretical wisdom, Aristotle's account of theoretical wisdom as an intellectual virtue commits him to the thought that theoretical wisdom is of greater value than other non-virtuous but nonetheless factive epistemic states of the same truths. I argue that it's unclear why this is so.

4.3.1. Why theoretical wisdom is a virtue of thought

Aristotle has already argued that happiness and the human good is activity of the soul in accordance with virtue and, if there is more than one, the best and most complete virtue (*EN* 1.7: 1098a16-18). Aristotle has also distinguished between two types of human virtue: virtue of character (ἠθικόν) and virtue of thought (διανοητικόν) (1.13: 1103a3-7). Aristotle goes on to describe virtue of character as a deliberatively choosing state, which is a middle in relation to us and is determined by reason, as the practically wise person would determine it (2.6: 1106b36-1107a2). The ostensible purpose of *Nicomachean Ethics* 6 is to give an account of the correct reason (ὁ ὀρθὸς λόγος) in order to better understand what it means to choose the mean determined by correct reason (6.1: 1138b25-34). To this end, Aristotle focuses our attention on the part of the soul that has reason and divides it into two: the knowledgeable (ἐπιστημονικόν) part, which contemplates beings whose principles do not admit of being otherwise, and the calculative (λογιστικόν) part, which contemplates beings that do admit of being otherwise (1139a3-8). Aristotle recommends that we determine the virtue – i.e. the best state (ἡ βελτίστη ἕξις) – of

both parts by considering the proper function (τὸ ἔργον τὸ οἰκεῖον) of each (1139a15-17). Presumably, we will have a better grasp of the correct reason, and so virtue of character, once we have identified the virtues of thought.

Aristotle then introduces an analogy between thought and desire: assertion and denial in the case of thought are equivalent to pursuit and avoidance in the case of desire (6.2: 1139a21-22). This allows Aristotle to further distinguish between practical and theoretical thought: because practical thought involves deliberative desire (ὄρεξις βουλευτική), the virtue of practical thought must involve both true reason and correct desire (1139a22-27, 29-31). Not so in the case of theoretical thought:

T4.3 But in the case of thought that is theoretical – and neither practical nor productive – the doing-well and doing-badly is [just] truth and falsity (for this is the function of everything that is of thought) (*EN* 6.2: 1139a26-29)

τῆς δὲ θεωρητικῆς διανοίας καὶ μὴ πρακτικῆς μηδὲ ποιητικῆς τὸ εὖ καὶ κακῶς τἀληθές ἐστι καὶ ψεῦδος (τοῦτο γάρ ἐστι παντὸς διανοητικοῦ ἔργον)·

After a discussion of the relationship between deliberate choice, desire, and action (1139a31-b5), and having given reasons as to why past occurrences cannot be an object of deliberate choice (1139b5-11), Aristotle concludes *Nicomachean Ethics* 6.2 as follows:

T4.4 Hence, the function of both of the intellectual parts [of the soul] is truth. And so, the states in accordance with which each [part] most of all grasps truth, these are the virtues of both. (*EN* 6.2: 1139b12-13)

ἀμφοτέρων δὴ τῶν νοητικῶν μορίων ἀλήθεια τὸ ἔργον. καθ' ἃς οὖν μάλιστα ἕξεις ἀληθεύσει ἑκάτερον, αὗται ἀρεταὶ ἀμφοῖν.

In so doing, Aristotle sets the criteria for determining the virtues of both the knowledgeable and calculative parts of the intellectual soul. The virtue of each will

be the state that most of all grasps the type of truth proper to each part. And such states are virtuous because, in so doing, each part performs its proper function and performs it well.[161] Aristotle thus exploits principles that are also at play in the function argument of *Nicomachean Ethics* 1.7, to which I turn below.[162]

Aristotle identifies five states of the soul by means of which the soul grasps truth by asserting and denying: craft (τέχνη), knowledge (ἐπιστήμη), practical wisdom (φρόνησις), theoretical wisdom (σοφία), and intellect (νοῦς) (6.3: 1139b15-17). Practical and theoretical wisdom are eventually identified as the virtues of the knowledgeable and calculative parts of the soul, respectively (6.11: 1143b14-17, 6.12: 1144a2). Craft falls by the wayside: craft is not itself a virtue, but there is virtue of craft (6.5: 1140b21-25). Knowledge and intellect are constitutive parts of theoretical wisdom, at least when concerned with objects that are by nature most estimable (τῶν τιμιωτάτων τῇ φύσει) (6.7: 1141b2-3). Intellect also has a role to play in practical matters because it is concerned with the starting-points of practical ends (6.11: 1143b4). Aristotle explicitly rules out both opinion (δόξα) and judgement (ὑπόληψις) as virtues of thought because they are not states of the soul by means of which we always grasp truth: neither are factive or, in Aristotle's parlance, both admit of being deceived (διαψεύδεσθαι, 6.2: 1139b17-18, cf. 6.6: 1141a3-7).

From herein I focus on theoretical wisdom, referring to it simply as wisdom unless there is need to distinguish between practical and theoretical wisdom. Wisdom is theoretical at least in so far as it is concerned with beings whose principles do not admit of being otherwise (6.7: 1141b8-12, 6.5: 1140a31-b4). As such, it is concerned with necessary and eternal truths. Call these *theoretical truths*. This marks a substantial difference between theoretical and practical wisdom: the practically wise person is able to deliberate well about what is good, advantageous, and beneficial for themselves (and, more generally, for humans), in relation to living well as a whole (6.5: 1140a25-28, 1140b7-10, 6.7: 1141a23-26). And one can only deliberate about what is capable of being otherwise. As such, practical thought

---

[161] Cf. *EN* 6.1 1139a15-17.

[162] Greenwood (1909: 74) and Richardson Lear (2004: 95) similarly note the relationship between *Nicomachean Ethics* 6.2 and the function argument.

is primarily concerned with contingent truths.[163] Theoretically wise people, such as Thales and Anaxagoras, are characteristically ignorant of what is advantageous to them. Rather, 'that which they know is said to be extraordinary, wondrous, difficult, and divinely-marvellous, but useless, because they do not inquire into human goods' (1141b6-8).[164] As noted, wisdom requires having both knowledge of demonstrations as well as non-demonstrative knowledge of the first principles of those demonstrations. What's more, wisdom is concerned with things that are by nature most estimable (6.7: 1141a17-22, 1141b2-8).

As noted, Aristotle makes clear that wisdom is a virtue because (i) it is a state by means of which the soul grasps truth most of all and (ii) truth is the function of the intellectual part of the soul. This line of reasoning looks back to Aristotle's function argument in *Nicomachean Ethics* 1.7. There, Aristotle argues according to the general principle that 'whatever has a function and action, the good and the doing-well seem to be in the function' (1097b26-27).[165] Aristotle draws a contrast between a lyre player and an excellent lyre player to make two further claims: that the function of something (e.g. a lyre player) is of the same kind as the function of an excellent version of the same thing (e.g. an excellent lyre player); and that the excellent lyre player plays well in accordance with virtue, whereas the mere lyre player merely plays the lyre (1098a8-12). It is virtue, then, that makes the difference between a mere lyre player and an excellent one. Whilst their function is the same in kind, the excellent lyre player performs the activity of lyre playing well

---

[163] Aristotle claims in the *Nicomachean Ethics* that demonstrative knowledge – and so, by extension, theoretical wisdom – is concerned with truths that are necessary without qualification, i.e. truths that are eternal (*EN* 6.3: 1139a21–24, cf. *Met* 5.5). It's not clear how to square this with Aristotle's claims elsewhere that it's possible to have demonstrative knowledge of truths that hold always or for the most part (*APo* 1.30, 2.12: 96a8-19). What's more, it's not clear how we should treat the status of universal truths that are in the purview of practical wisdom, such as the fact that light meats are healthy (*EN* 6.7: 1141b18-19). Can such truths be demonstratively known and, if so, does this mean that practical wisdom is concerned with some necessary truths (or at least some truths that are necessary in a restricted sense)? Cf. Henry 2015a.

[164] καὶ περιττὰ μὲν καὶ θαυμαστὰ καὶ χαλεπὰ καὶ δαιμόνια εἰδέναι αὐτούς φασιν, ἄχρηστα δ', ὅτι οὐ τὰ ἀνθρώπινα ἀγαθὰ ζητοῦσιν

[165] καὶ ὅλως ὧν ἔστιν ἔργον τι καὶ πρᾶξις, ἐν τῷ ἔργῳ δοκεῖ τἀγαθὸν εἶναι καὶ τὸ εὖ

and finely – the mere lyre player does not. Similarly, Aristotle proposes that an excellent human performs its function well, such that each human activity and action is performed and completed well in accord with its proper virtue (1098a12-15). Since the proper human function – that which is special to humans as animals – is activity of the soul in accord with reason, Aristotle concludes that the human good is 'activity of the soul according to virtue and, if there are many virtues, according to the best and most complete' (1098a16-18).[166]

Aristotle's function argument is admittedly vexed.[167] Nonetheless, two points are relatively uncontroversial. First, the good and the doing-well of something, *x*, is found in its proper function. Second, *x* performs its proper function well in accordance with its proper virtue. Aristotle later adds to this that the virtue of *x* not only ensures the good performance of *x*'s function, but also that *x* is good as an *x*:

T4.5   And so, one must say that every virtue, regardless of what thing it is the virtue of, both completes the good state of that thing and renders its function well, e.g. the virtue of an eye both makes the eye and its function excellent; for we see well in virtue of the eye's virtue. Similarly, the virtue of a horse makes the horse excellent, good at running, carrying its rider, and standing firm against enemies. If, then, this holds in every case, the virtue of a human will also be the state in virtue of which [a human] becomes a good human and in virtue of which [a human] will perform its own function well. (*EN* 2.6: 1106a15-24).

ῥητέον οὖν ὅτι πᾶσα ἀρετή, οὗ ἂν ᾖ ἀρετή, αὐτό τε εὖ ἔχον ἀποτελεῖ καὶ τὸ ἔργον αὐτοῦ εὖ ἀποδίδωσιν, οἷον ἡ τοῦ ὀφθαλμοῦ ἀρετὴ τόν τε ὀφθαλμὸν σπουδαῖον ποιεῖ καὶ τὸ ἔργον αὐτοῦ· τῇ γὰρ τοῦ ὀφθαλμοῦ ἀρετῇ εὖ ὁρῶμεν. ὁμοίως ἡ τοῦ ἵππου ἀρετὴ ἵππον τε σπουδαῖον ποιεῖ καὶ ἀγαθὸν δραμεῖν καὶ ἐνεγκεῖν τὸν ἐπιβάτην καὶ μεῖναι τοὺς πολεμίους. εἰ δὴ τοῦτ' ἐπὶ πάντων οὕτως ἔχει, καὶ ἡ τοῦ ἀνθρώπου ἀρετὴ εἴη ἂν ἡ ἕξις ἀφ' ἧς ἀγαθὸς ἄνθρωπος γίνεται καὶ ἀφ' ἧς εὖ τὸ ἑαυτοῦ ἔργον ἀποδώσει.

---

[166] τὸ ἀνθρώπινον ἀγαθὸν ψυχῆς ἐνέργεια γίνεται κατ' ἀρετήν, εἰ δὲ πλείους αἱ ἀρεταί, κατὰ τὴν ἀρίστην καὶ τελειοτάτην

[167] For discussion see Barney 2008, Baker 2015, Charles 2017.

We can apply these thoughts directly to theoretical wisdom and the knowledgeable part of the soul. First, the good and the doing-well of the knowledgeable part of the soul is found in its proper function: truth and, in particular, theoretical truth. As such, Aristotle is committed to a form of truth value monism: theoretical truth is the sole bearer of final value in respect of theoretical thought, because it is both the doing-well and goal of theoretical thought (T4.3, cf. *Met* 2.1: 993b20-21). Second, the knowledgeable part of the soul performs its proper function well when it does so in accordance with its proper virtue, i.e. theoretical wisdom. Aristotle is explicit that this is because theoretical wisdom is the state that grasps theoretical truth most of all (T4.4). Third, theoretical wisdom not only ensures that the knowledgeable part of the soul performs its function well, but also that the knowledgeable part of the soul is in the best condition possible, i.e. it is good *qua* knowledgeable part of the soul. In this sense, theoretical wisdom is valuable. And it is also better than any non-virtuous state of the knowledgeable part of the soul. This is because it is the state in virtue of which a knower grasps theoretical truths most of all or well. The value of theoretical wisdom, then, must be found in its particular way of grasping theoretical truth.

4.3.2. *Plato's value problem applied to theoretical wisdom*

These claims allow us to formulate a version of Plato's value problem for theoretical wisdom. In brief, Aristotle argues that:

(1) Theoretical wisdom is the virtuous state of the knowledgeable part of the soul because it is the state that grasps theoretical truth *most of all* or *well*;

(2) The virtuous state of the knowledgeable part of the soul is better and more valuable than non-virtuous states of the same part of the soul that *merely* grasp theoretical truth;

(3) Therefore: Theoretical wisdom is better and more valuable than non-virtuous states of the knowledgeable part of the soul that *merely* grasp theoretical truth.

The difficulty, however, is that it's unclear what it means to grasp theoretical truth most of all or well and, in particular, how this should be distinguished from merely grasping theoretical truth. If Aristotle's distinction lacks substance, we should take Meno's lead and ask: Why is theoretical wisdom more valuable than non-virtuous but factive epistemic states that have a mere grasp of the very same truths as theoretical wisdom? And what in fact distinguishes theoretical wisdom from non-virtuous but factive epistemic states that grasp the very same truths as theoretical wisdom? Unless we are able to specify theoretical wisdom's good way of grasping the truth, we won't be in a position to explain the distinctive value of theoretical wisdom over non-virtuous but nonetheless factive epistemic states concerned with the same theoretical truths.

4.4. Four insufficient responses to the value problem

With Plato's value problem applied to Aristotle's account of theoretical wisdom, I now consider four potential responses. I argue that each is insufficient before sketching an alternative proposal (§4.5). In the following, I initially use true opinion as a candidate epistemic state that is (i) non-virtuous, (ii) factive, and (iii) has a *mere* grasp of the same theoretical truths as theoretical wisdom. I address concerns about the proper objects of opinion in §4.4.3.

4.4.1. Wisdom is a virtue

In *Nicomachean Ethics* 6.12-13, Aristotle raises and answers several objections about the worth of theoretical and practical wisdom. In the first case, Aristotle wonders about the use of theoretical wisdom:

T4.6   But one might have become puzzled about what use these [i.e. practical and theoretical wisdom] are. For, theoretical wisdom contemplates not one [of the things] from which a human will be happy (for [it contemplates] not one [thing's] becoming) […] (*EN* 6.12: 1143b18-20)

Διαπορήσειε δ' ἄν τις περὶ αὐτῶν τί χρήσιμοί εἰσιν. ἡ μὲν γὰρ σοφία οὐδὲν θεωρήσει ἐξ ὧν ἔσται εὐδαίμων ἄνθρωπος (οὐδεμιᾶς γάρ ἐστι γενέσεως) […]

Aristotle replies to this puzzle with the thought that wisdom is a virtue and, as a virtue, it is necessary that wisdom is a state of the soul that is choiceworthy because of itself:

T4.7 And so, let us first say that these [states] are necessarily choiceworthy according to themselves – each is, at least, the virtue of each of the parts [of the soul that has reason] – even if neither of them produces anything at all. (*EN* 6.12: 1144a1-3)

πρῶτον μὲν οὖν λέγωμεν ὅτι καθ' αὑτὰς ἀναγκαῖον αἱρετὰς αὐτὰς εἶναι, ἀρετάς γ' οὔσας ἑκατέραν ἑκατέρου τοῦ μορίου, καὶ εἰ μὴ ποιοῦσι μηδὲν μηδετέρα αὐτῶν.

This presents a straightforward answer to the value problem: wisdom is of greater value than (e.g.) true opinion because wisdom, unlike true opinion, is a virtue, and virtues are choiceworthy because of themselves – even if they are productive of nothing.[168] However, this solution doesn't do enough to answer the value problem applied to theoretical wisdom. Even if we grant that virtues are choiceworthy for their own sake, Aristotle must explain what it is about wisdom that makes it virtuous, i.e. in what sense wisdom grasps theoretical truth well. This account must distinguish wisdom from non-virtuous epistemic states (e.g. true opinion) and explain why wisdom is, in fact, choiceworthy for its own sake.

4.4.2. Wisdom is productive of happiness

In *Nicomachean Ethics* 6.12, Aristotle immediately offers a further response to his puzzle about the usefulness of wisdom:

---

[168] See also *EN* 1.7: 1097a25-b6.

T4.8   Next, they [i.e. practical and theoretical wisdom] do indeed produce [something], though not as medicine [produces] health, but as health [produces health] – in this manner theoretical wisdom [produces] happiness; for, as part of virtue as a whole, [theoretical wisdom] produces happiness by being possessed and by being actualised. (*EN* 6.12: 1144a3-6)

ἔπειτα καὶ ποιοῦσι μέν, οὐχ ὡς ἡ ἰατρικὴ δὲ ὑγίειαν, ἀλλ' ὡς ἡ ὑγίεια, οὕτως ἡ σοφία εὐδαιμονίαν· μέρος γὰρ οὖσα τῆς ὅλης ἀρετῆς τῷ ἔχεσθαι ποιεῖ καὶ τῷ ἐνεργεῖν εὐδαίμονα.[169]

Medicine and health produce health in different ways: medicine can bring about and sustain health but is external to it. Health, on the other hand, brings about the active state of being healthy in virtue of being possessed and actualised. In this sense, theoretical wisdom brings about the active state of being happy, in virtue of being both possessed and actualised. Again, we have another straightforward answer to Aristotle's value problem: wisdom produces happiness and (e.g.) true opinion does not, so wisdom is more valuable than true opinion. But this answer is as uninformative as the first. Aristotle must tell us what it is about possessing and actualising wisdom that is productive of happiness and what true opinion lacks such that it is not. For this, Aristotle must at least explain why theoretical wisdom is the virtue of the knowledgeable part of the soul and, thus, what it means for theoretical wisdom to grasp truth most of all or well.

4.4.3. Only wisdom has access or full access to theoretical truth

Another straightforward way of avoiding the value problem for theoretical wisdom is to claim that only theoretical wisdom has access or full access to theoretical truth. In this sense, only theoretical wisdom grasps theoretical truth most of all or well. For example, one might draw on the fact that Aristotle appears to claim that true opinion is restricted to contingent truths. This would block a value problem that

---

[169] Bywater obelizes τῷ ἐνεργεῖν εὐδαίμονα. This textual issue is not pertinent for my current purposes.

compares theoretical wisdom and true opinion from being formulated: wisdom and true opinion are in no way equivalent in relation to necessary, theoretical truths, because true opinion has no access to necessary, theoretical truths. This response has at least *prima facie* textual support. In *Posterior Analytics* 1.33, Aristotle appears to claim that there is no knowledge of contingent truths and, similarly, that there is no opinion of necessary truths (88b30-89a4). He then goes on to explain in what sense knowledge and true opinion can be about the same object, e.g. in what sense "human" can be the object of both knowledge and true opinion (89a11-b6).

Posterior Analytics 1.33 is particularly notable because there is reason to think that questions about the relative value of knowledge and true opinion lurk in the background. In support of his initial account of the distinction between knowledge and true opinion, Aristotle invokes the apparent instability (ἀβέβαιος) of opinion (89a4-6) – perhaps looking back to Socrates' claim that knowledge, unlike true opinion, is steadfast. What's more, Aristotle worries that if we were to posit that every object of knowledge can also be the object of opinion (indeed, all such cases will be instances of *true* opinion), then there will be no difference between knowledge and true opinion (89a11-13). Aristotle imagines an opiner who has true opinions about both the facts and the reasons why and follows the same deductive path as someone who knows by means of a demonstration (89a13-16). Otherwise put, they opine the very same demonstration that the knower demonstratively knows. But surely to truly opine a demonstration is equivalent to knowing it. In such cases, then, Aristotle is concerned that the distinction between knowledge and true opinion will collapse – perhaps reflecting Meno's concern about what distinguishes knowledge from true opinion. The remainder of the chapter can then be read as Aristotle's attempt to balance two ideas: first, that in some sense it is possible to know and opine the same object, and, second, that knowledge and true opinion are not the same. But why should this distinction matter? One potential reason is that Aristotle presupposes that knowledge is in some sense better than true opinion and, in virtue of this, they better be distinct. We can then read *Posterior*

Analytics 1.33 as Aristotle's attempt to vindicate the value of knowledge over true opinion.[170]

Interpretations of *Posterior Analytics* 1.33 vary, but most share the common feature that there are some objects that only knowledge has access to, such that the objects of true opinion and knowledge are not co-extensive.[171] For example, according to Gail Fine (2004) Aristotle argues that there can be both knowledge and opinion about the same objects (e.g. "human") but knowledge is restricted to necessary propositions about that object (e.g. "humans are necessarily rational animals") and true opinion is restricted to contingent propositions about the same object (perhaps, e.g., "this human is walking"). Consequently, there is no proposition that can be both known and opined. Michail Peramatzis (forthcoming), on the other hand, argues that there may be both true opinion and knowledge of some necessary propositions (e.g. that triangles necessarily have 2R). The difference between the knower and the true opiner, is that the knower succeeds in grasping the proper, essentialist explanatory grounds of those necessary propositions (e.g. that triangles necessarily have 2R *because* triangles are essentially three-sided, rectilinear figures). The true opiner fails in this respect. As such, true opinion can take necessary propositions as its object and can even opine them *as* necessary. However, the true opiner lacks a limited set of necessary truths, i.e. explanatory truths that connect necessary truths to their proper, essentialist, explanatory grounds.

Either interpretation would work to block the value problem. On Fine's view, only wisdom and its constitutive parts (i.e. knowledge and intellect) would have access to necessary truths, such that true opinion has no access to necessary truths. On Peramatzis', there would be some necessary truths that only wisdom and its constituent parts have access to, such that true opinion only has partial access to necessary truths. In both cases the value of wisdom over true opinion can be explained in virtue of its superior grasp of theoretical truth.

---

[170] Peramatzis (forthcoming) similarly reads *Posterior Analytics* 1.33 as addressing questions about the value of knowledge.

[171] Cf. Morison forthcoming.

Nonetheless, Aristotle allows that there are some epistemic states that fall short of demonstrative knowledge but have access to all of the very same truths as knowledge. In *Nicomachean Ethics* 7.3, Aristotle describes weakness of will by considering a distinction between having and using knowledge. He makes clear that we can have knowledge in different ways, such that there is a sense in which someone can be said both to have and not to have knowledge, e.g. if someone knows but is asleep, mad, or drunk (1147a11-14). Aristotle compares the weak-willed person with the knower who is drunk: they have knowledge but, because they are intoxicated, cannot be said to be in proper possession of their knowledge (1147a14-18):

T4.9　And the fact that they say the words that come from knowledge is a sign of nothing; for, also, those in the grip of their feelings say the demonstrations and verses of Empedocles, and those who have first learned [something] string the words together, but they do not yet know; for, it must grow into [them] and this requires time; so we must suppose that those who are acting without self-control are also talking like actors on a stage. (*EN* 7.3: 1147a18-24)

τὸ δὲ λέγειν τοὺς λόγους τοὺς ἀπὸ τῆς ἐπιστήμης οὐδὲν σημεῖον· καὶ γὰρ οἱ ἐν τοῖς πάθεσι τούτοις ὄντες ἀποδείξεις καὶ ἔπη λέγουσιν Ἐμπεδοκλέους, καὶ οἱ πρῶτον μαθόντες συνείρουσι μὲν τοὺς λόγους, ἴσασι δ' οὔπω· δεῖ γὰρ συμφῦναι, τοῦτο δὲ χρόνου δεῖται· ὥστε καθάπερ τοὺς ὑποκρινομένους, οὕτως ὑποληπτέον λέγειν καὶ τοὺς ἀκρατευομένους.

Aristotle here imagines a recent-learner, who is able to string the words together but does not yet know what they have learned. We may plausibly imagine that the recent-learner has just learned a demonstration, which contains not only necessary truths but also their proper, essentialist, explanatory grounds, e.g. that triangles necessarily have 2R because triangles are essentially three-sided, rectilinear figures. And we may plausibly imagine that the recent-learner has learned them as such: they have been told and (in some sense) know that they have learned a necessary truth by means of its essentialist, causal, explanation. In this sense, as the learner's knowledge grows into them it need not be the case that they acquire any new

content. Indeed, we can even imagine that the recent-learner has been told and remembers all of the truths belonging to a particular body of knowledge.

What, then, does this recent-learner lack? Elsewhere, Aristotle offers a brief explanation as to why a young person can become knowledgeable of mathematics but neither practically wise, theoretically wise, nor knowledgeable of nature. Aristotle argues that practical wisdom requires knowledge of particulars, which comes by means of experience and in turn requires time (*EN* 6.8: 1142a11-16, cf. 1.3: 1095a2-11). Mathematical objects, on the other hand, are given by abstraction (1142a19). Aristotle also claims that the first principles of theoretical wisdom come from experience, such that a young person may be able to say the words that come from wisdom but lack conviction (1142a16-20). Note, however, that this can't be conviction in the sense of subjective certainty. Aristotle is clear about this: someone who merely opines can be subjectively certain, e.g. they may have no doubt about the truth of their opinions, thinking that they have the most exact knowledge (7.3: 1146b24-31, cf. *MM* 2.6: 1201b5-8). And there's no reason to presuppose that the learner does not believe what they have learned. They may believe it simply in virtue of the fact that they have been taught it by their teacher. Presumably, then, both the young-learner and the recent-learner could both be subjectively certain about what they have learned. Aristotle's point is that they will lack the appropriate rational conviction that comes from experience.[172]

Whatever this experiential lack amounts to, it's clear that Aristotle allows for epistemic states that fall short of demonstrative knowledge but have a mere true grasp of the very same truths that the knower demonstratively knows.[173] Consequently, we can readily reformulate Aristotle's version of the value problem, replacing the true opiner with the recent-learner who has been told, remembers,

---

[172] Burnyeat 1981: 130.

[173] This does not require that Aristotle conceives of experience as non-propositional. Whatever experience adds, it does not add the type of propositional content that figures in demonstrations. As such, the recent-learner (who lacks experience) and the demonstrative knower (who possesses experience) have access to all of the same propositions that are either demonstratively known or known as the first principles of demonstrations. For discussion on the content of Aristotelian experience, see LaBarge 2006, Gregorić & Grgić 2006, Hasper & Yurdin 2014.

and believes all of the truths about which wisdom is concerned (i.e. of both demonstrations and first principles). The problem, then, is why wisdom is more valuable than the epistemic state of the recent-learner. An answer to this problem must draw upon something other than the fact that the theoretically wise person has a true grasp of necessary truths and proper, essentialist, causal explanations – for the recent-learner has a true grasp of the very same objects.

That said, Aristotle's distinction between the recent-learner and the knower has substance. In particular, the knower grasps theoretical truth with knowledge and understanding whereas the recent-learner does not. As it will turn out, the fact that the theoretically wise person grasps theoretical truth with knowledge and understanding will be essential to the sense in which they grasp truth well. What's unclear, however, is why grasping theoretical truth with knowledge and understanding adds value to theoretical wisdom. This depends in part on the sense in which theoretical truth is valuable. Consider again the road to Larissa. In this example, truth is instrumentally valuable on acting successfully, i.e. on getting to Larissa, such that it need not matter that one knows and understands such truths for oneself. After all, one could very well (and very reliably) get to Larissa by following the instructions of a GPS.[174] So, if Aristotle is to claim that knowledge and understanding adds value to the theoretically wise person's grasp of truth, then he must provide us with an account of the value of theoretical truth that depends upon grasping it with knowledge and understanding. Otherwise put, the value of theoretical truth must be such that the specific way the theoretically wise person grasps it (e.g. with knowledge and understanding) is necessary for attaining its value. I'll explore this issue at length over the forthcoming chapters. For now, we can conclude that the claim that only theoretical wisdom has access to theoretical truth will not suffice to explain Aristotle's distinction between merely grasping theoretical truth and grasping theoretical truth well. This is because the epistemic state of the recent-learner grasps the very same theoretical truths as the theoretically wise person but nonetheless fails to grasp theoretical truth well. And more must be

---

[174] Harte forthcoming.

said about how grasping theoretical truth well (whatever that amounts to) adds value to the theoretically wise person's grasp of truth.

4.4.4. Only wisdom has a persistent grasp of theoretical truth

An alternative response argues that only wisdom has a persistent grasp of truth, whereas true opinion and the epistemic state of the recent-learner do not. As Aristotle makes clear in *Nicomachean Ethics* 6.7, wisdom is one of five states of the soul in virtue of which we assert and deny truly, and by means of which we are *never* deceived (μηδέποτε διαψευδόμεθα, 6.6: 1141a3-7). We may read this in one of two ways: either synchronically, such that Aristotle is merely claiming that wisdom is factive; or diachronically, such that wisdom is not only factive but persists over time, in the manner that the *Meno*'s Socrates claims that knowledge is steadfast. On the diachronic interpretation, when Aristotle tells us that we are deceived by means of opinion, he means both (i) that some opinions are false and (ii) that true opinions will escape us like the statues of Daedalus. Similarly, wisdom grasps theoretical truth most of all and well because wisdom persists: it is always true, both synchronically and diachronically. Following along similar lines as the CTO reading of Plato's value problem, Aristotle may then claim that, even though wisdom and true opinion are both true, *current* wisdom is more valuable than *current* true opinion because current true opinion does not persist (and similarly in the case of the recent-learner).

This reading also has external textual support. As already noted, Aristotle remarks that true opinion is unstable in *Posterior Analytics* 1.33. And in *Categories* 8 (8b25-9a13) Aristotle characterises knowledge as on a par with virtue, in so far as both are states (ἕξεῖς) rather than dispositions (διαθέσεις). A characteristic of states is that they are longer lasting than dispositions and are more steadfast (μονιμώτερος, 8b28). Indeed, states such as knowledge seem to be permanent

(παραμόνιμος, 8b30). Dispositions, on the other hand, such as hotness and chill, sickness and health, are easily and quickly changed.[175] Aristotle remarks that:

T4.10   For, those who have not altogether mastered the bodies of knowledge, but are easily changed, are not said to be in a state [of knowledge], even though they are indeed somehow disposed according to that knowledge, either better or worse. (*Cat* 8: 9a5-8)

τοὺς γὰρ τῶν ἐπιστημῶν μὴ πάνυ κατέχοντας ἀλλ' εὐκινήτους ὄντας οὔ φασιν ἕξιν ἔχειν, καίτοι διάκεινταί γέ πως κατὰ τὴν ἐπιστήμην ἢ χεῖρον ἢ βέλτιον.

Aristotle's recent-learner might similarly be imagined as someone who has not yet mastered what they have learned. As such, the recent-learner's epistemic condition lacks the stability and steadfastness of someone who knows, in spite of the fact that they are in some sense better disposed towards that knowledge than if they had learned nothing at all. And the recent-learner's epistemic condition need not be easily changed because they do not believe what they have just learned, i.e. because they lack subjective certainty. Rather, they may easily be convinced out of their belief, e.g. by a difficult question or misleading counter-evidence, because they lack rational conviction. In this sense, the recent-learner may currently believe and grasp the same theoretical truths that the theoretically wise person grasps well, but their grasp is neither resilient nor persistent. As such, their grasp of theoretical truth is left wanting.[176]

Aristotle makes similar suggestions in *Nicomachean Ethics* 1.10:

T4.11   For none of the functions of human beings are as stable as those concerned with activities in accord with virtue, since they seem to be more steadfast even than bodies of knowledge. And of these bodies of knowledge themselves, the most estimable are more steadfast, because the blessed live

---

[175] The difference is apparently one of degree, such that a disposition could perhaps become second nature and thus a state through a great amount of time (9a1-4). But the distinction is nonetheless clear, even if it suffers from vague boundary cases.

[176] Cf. *Met* 4.4: 1008b27-31.

most of all and most continuously in accord with them. This would seem to be the cause, indeed, of why forgetfulness does not occur where they are concerned. (*EN* 1.10:1100b12-17)

περὶ οὐδὲν γὰρ οὕτως ὑπάρχει τῶν ἀνθρωπίνων ἔργων βεβαιότης ὡς περὶ τὰς ἐνεργείας τὰς κατ' ἀρετήν· μονιμώτεραι γὰρ καὶ τῶν ἐπιστημῶν αὗται δοκοῦσιν εἶναι· τούτων δ' αὐτῶν αἱ τιμιώταται μονιμώτεραι διὰ τὸ μάλιστα καὶ συνεχέστατα καταζῆν ἐν αὐταῖς τοὺς μακαρίους· τοῦτο γὰρ ἔοικεν αἰτίῳ τοῦ μὴ γίνεσθαι περὶ αὐτὰς λήθην.

Perhaps knowledge and virtue are not on a par in respect of their stability. But, importantly, Aristotle explicitly links stability with value: the most estimable bodies of knowledge are those that are most steadfast and, in virtue of their steadfastness, the blessed are able to live most of all and most continuously in accordance with them.

What should we make of these remarks? We might be inclined to look forward to *Nicoamachean Ethics* 10.7, where Aristotle proposes that complete happiness is (or requires) contemplative activity of the intellect in accordance with the best virtue: wisdom. There, Aristotle evaluates his proposal in relation to the *desiderata* of happiness, one of which is that complete happiness is the most continuous activity. Contemplation ticks this box: 'for, we can contemplate more continuously than we can act, whatsoever' (1177a21-22).[177] One obvious criterion for the ability to continuously contemplate is that we have a persistent grasp of truth: it's not possible to continuously contemplate a body of truths if one does not have a persistent grasp of that body of truths. If wisdom, like knowledge, is steadfast in respect of truth, but true opinion or the condition of the recent learner is unstable, then wisdom will ensure that truth can be grasped and contemplated continuously and, in this sense, well. This also provides an answer to the sense in which theoretical wisdom's good grasp of theoretical truth is valuable: the blessed are able

---

[177] θεωρεῖν [τε] γὰρ δυνάμεθα συνεχῶς μᾶλλον ἢ πράττειν ὁτιοῦν.

to live both most of all and most continuously in accordance with theoretical wisdom.[178]

In virtue of this, the persistence that theoretical wisdom has because of its stability will indeed be part of Aristotle's account of what is required to grasp theoretical truth well, and thus the value of theoretical wisdom. However, recourse to persistence alone fails to answer the hard value problem, as discussed in §4.2.3. In particular, the idea that wisdom has a persistent grasp of truth fails to explain why wisdom is more valuable than the epistemic condition of the recent learner, if it were to persist. As argued, the hard value problem is certainly a plausible reading of the *Meno* and so we might wonder whether Aristotle has the resources to answer it. Of course, Aristotle may well have claimed that persistence is untypical of non-virtuous epistemic states, or that it is practically unheard of: for persistence, one must be theoretically wise. Nonetheless, by pushing Aristotle to answer the hard value problem, we will arrive at a richer picture of theoretical wisdom and the sense in which the theoretically wise person grasps truth well – one that goes beyond mere persistence.

4.5. Conclusion: an alternative proposal

How else might we interpret Aristotle's claim that wisdom is a virtue because it is the state by means of which we grasp theoretical truth most of all or well? In the next chapter, I look to *Nicomachean Ethics* 2.4, where Aristotle lists three criteria that distinguish the mere performance of virtuous action from virtuous action performed well or virtuously. Aristotle argues that there is a substantive difference between, for example, performing a just action and performing it in the way that the just person would. In particular, the just person not only performs just actions, but they also (i) do so knowingly, (ii) deliberately choose the action for its own sake, and (iii) act from a stable and unchanging state (1105a28-b9). Aristotle claims that

---

[178] I am not committed to interpreting T4.11 in light of Aristotle's account of complete happiness in *Nicomachean Ethics* 10.7-8. Rather, I offer this interpretation as a way in which one might respond to the value problem I pose for theoretical wisdom.

these agential conditions are essential for virtuous agency. This stands in stark contrast to the crafts, where it is only important that the product is good. If someone were to build a good house by accident, this would be just as good as a good house that is the manifestation of its builder's skill (1105a26-28).

Aristotle does not discuss a parallel case for theoretical intellectual virtue and it is clear that Aristotle's three agential conditions are intended to apply to virtuous action. Nonetheless, I motivate the thought that analogous versions of all three agential conditions apply to Aristotle's distinction between the mere grasping of theoretical truth and theoretical truth grasped well, i.e. in accordance with theoretical wisdom. On this view, the theoretically wise person must indeed fulfil an epistemic condition and a stability condition: they must grasp theoretical truth with full understanding and they must grasp theoretical truth on the basis of knowledge and understanding that is steadfast and thus persistent. However, I argue that the addition of a motivational condition, according to which the theoretically wise person ascribes final value to the activities and objects of wisdom (such that they contemplate and grasp theoretical truth for its own sake), is essential to accounting for the value of theoretical wisdom. What's more, it provides Aristotle with the resources to answer the hard value problem. Explicating the role of the motivational condition will be the work of Chapters 6 and 7. The next chapter is dedicated to motivating the thought on textual grounds that analogues of all three conditions for virtuous agency might also be applicable to the activities of theoretical wisdom.

5. Virtuous agency and grasping theoretical truth well

5.1. Introduction

In the previous chapter, I argued that Aristotle faces a version of Plato's value problem applied to theoretical wisdom. The value problem asks why theoretical wisdom is better than non-virtuous but nonetheless factive epistemic states that grasp all of the same truths as theoretical wisdom (as the epistemic condition of the recent-learner could be construed). Aristotle's answer is that theoretical wisdom is the virtue of the knowledgeable part of the soul (and thus its best epistemic state) because theoretical wisdom grasps theoretical truths most of all or well. I argued that, in order to vindicate the value of theoretical wisdom, we must find a suitable way of understanding the distinction between the mere grasp of theoretical truth and grasping theoretical truth well. In §4.4.3, I argued that, whilst grasping theoretical truth with knowledge and understanding might be an important aspect of grasping theoretical truth well, it's not clear how this explains the value of theoretical wisdom; this aspect of theoretical wisdom's good grasp of truth must be underwritten by an account of the value of theoretical truth that explains why grasping theoretical truth with knowledge and understanding is of greater value than merely grasping theoretical truth (as the recent-learner does). In §4.4.4, I also argued that stability and persistence is insufficient to answer the hard version of the value problem. In response, I proposed that we look to Aristotle's distinction between mere virtuous action and virtuous action performed virtuously in *Nicomachean Ethics* 2.4. There, Aristotle claims that three agential conditions are necessary for virtuous agency: the agent must (i) act with knowledge (the epistemic condition); (ii) choose and choose the action because of itself (the motivational condition); and (iii) act from a stable and unchanging state (the stability condition).

In this chapter, I argue for two proposals:

P1   Just as we acquire character virtues only if we perform the characteristic activities of those virtues (e.g. we become just only if we perform just

actions), and just as we acquire crafts by engaging in the characteristic activities of those crafts (e.g. we become housebuilders by building houses), theoretical wisdom is acquired by an analogous process of learning by doing: we become theoretically wise only if we engage in the activities that are characteristic of theoretical wisdom. Such activities include but may not be limited to contemplation and grasping theoretical truth.

P2   Aristotle distinguishes between mere virtuous action and virtuous action performed virtuously with reference to three agential conditions: the epistemic, the motivational, and the stability conditions. Aristotle similarly distinguishes between the mere performance of theoretical intellectual activities and those activities performed wisely (i.e. well) with reference to analogues of the same three agential conditions. For example, in order to contemplate wisely and well, the contemplator must (in some sense) (i) contemplate knowingly, (ii) choose to contemplate and choose to contemplate for the sake of contemplation itself, and (iii) contemplate from a stable and unchanging state.

I argue for P1 predominantly in order to motivate P2: Aristotle distinguishes between mere virtuous action and action performed virtuously in order to make coherent his claim that we become virtuous by doing virtuous things. If Aristotle also maintained that we become theoretically wise by doing wise things, he will also have to make this claim coherent and may plausibly do so by appealing to a distinction between wise activity and wise activity performed wisely. This is the task of §5.3. However, P2 is only a candidate response to the puzzles that P1 raises; in order to make P1 coherent, Aristotle need not commit to analogues of *all three* agential conditions in the case of theoretical intellectual activity. I thus provide further argument for P2 in §5.4 and the next chapter.

In arguing for P2, I pay particular attention to the case of contemplation: in order to contemplate wisely, the contemplator must fulfil analogues of the epistemic, motivational, and stability conditions. But I treat P2 as also applying to

grasping truth, such that all three agential conditions serve to substantiate Aristotle's distinction in *Nicomachean Ethics* 6 between the mere grasping of theoretical truth and theoretical truth grasped well. Aristotle doesn't tell us a great deal about what kind of activity contemplation is and, as such, it's not clear how contemplation and grasping truth are related.[179] Θεωρία has connotations of spectating, seeing things in the round, beholding a spectacle, considering, and reflecting, amongst other things. However, I assume that contemplating theoretical truth minimally involves grasping truth by means of assertion and denial. Indeed, I think we ought to think this, if we are to take seriously Aristotle's claims (i) that theoretical wisdom is the virtue of the knowledgeable part of the soul because it is the state that grasps truth well by means of assertion and denial (*EN* 6.2, 6.7) and (ii) that contemplative activity of intellect is an activity of complete or perfect happiness when performed in accordance with its proper virtue, i.e. theoretical wisdom (*EN* 10.7-8).[180]

At this stage, it's worth noting that the two insufficient ideas explored in §§4.4.3-4 – that grasping theoretical truth well requires (i) grasping theoretical truth with knowledge and understanding, and (ii) having a stable and persistent grasp of theoretical truth – will be incorporated under the epistemic condition and the stability condition, respectively. As such, when motivating P2 I focus particularly on the motivational condition in respect of theoretical wisdom, which I consider to require the most work to establish, and to provide essential content for Aristotle's answer to the value problem applied to theoretical wisdom. In particular, I argue that the theoretically wise person's virtuous motivations are but one aspect of their

---

[179] Cf. Roochnik 2009.

[180] Of course, ἀληθεύειν can refer to the process of arriving at truth, in which one starts without a grasp of truth and comes to grasp it, just as someone who is learning starts without knowing and comes to know. However, ἀληθεύειν can also refer to grasping a truth (or truths) that one already has a grasp of, e.g. when one brings to mind, thinks, considers, or contemplates a truth (or truths) that one has already grasped. In the latter case, I take it that grasping truth is an activity, in the sense that Aristotle considers contemplating, thinking, and perceiving to be activities: at the same time, one has grasped truth and is grasping truth, just as one has thought and is thinking (*Met* 9.6: 1048b18-35).

love of wisdom, in virtue of which the theoretically wise person ascribes final value to the characteristic activities and proper objects of theoretical wisdom. In Chapters 6 and 7, I explore two senses in which the theoretically wise person's virtuous motivations and love of wisdom explain the distinctive value of theoretical wisdom. The purpose of this chapter is to provide textual motivation for this interpretation.

I first set the stage for motivating P1 and P2 with an overview of Aristotle's account of virtue acquisition and his distinction between mere virtuous action and virtuous action performed virtuously in *Nicomachean Ethics* 2.1 and 2.4 (§5.2). I then establish P1 through a consideration of Aristotle's account of learning by reason (λόγῳ) in *Metaphysics* 9 (§5.3). Finally, I provide motivation for P2 by considering the analogous nature of the evaluative status of the activities of practical and theoretical virtue (§5.4).

5.2. Setting the stage: virtue acquisition in *Nicomachean Ethics* 2.1 & 2.4

In *Nicomachean Ethics* 2.1, Aristotle argues that the virtues of character do not come to be in us either by nature or contrary to nature (1103a18-23). Rather, we acquire them as a result of habit (ἐξ ἔθους) (1103a17-18). On Aristotle's view, a stone by nature moves downwards. And its natural disposition is fixed: a stone cannot be habituated such that it will tend to move in any other direction, no matter how often one forces it to engage in a contrary activity, e.g. by throwing it up in the air (1103a18-23). Virtue, on the other hand, is not given to us by nature: it is acquired through a process of habituation. But nor are virtues contrary to nature, rather: 'we are naturally receptive of them, being completed through habit' (1103a25-26).[181] In this sense, at least, we are like the stone: habituation is not a process by means of which our nature is reversed by engaging in activities that are contrary to it. Through proper habituation, we are brought to perfection.[182]

How, then, do we acquire virtue through habituation? To illustrate, Aristotle first draws a contrast between perception and virtue, and then an analogy between

---

[181] πεφυκόσι μὲν ἡμῖν δέξασθαι αὐτάς, τελειουμένοις δὲ διὰ τοῦ ἔθους

[182] See also *Phy*. 7.3: 246a10 *ff*.

virtue and craft. Perception is a power (δύναμις) that we are provided with by nature, just as the stone has a natural disposition to fall. As such, we first acquire our perceptual powers and later engage in the activity of perceiving. We do not acquire the power of sight through many acts of seeing and practice (1103a26-31). But the opposite is true in the case of virtue:

T5.1 […] we acquire the virtues having first been in activity, just as also concerning the other crafts; for, the things which one must produce having learned, we learn by producing them, e.g. we become house builders by building houses and kithara players by playing the kithara; and in this way, then, we become just by doing just things, and temperate by temperate things, and brave by brave things. (*EN* 2.1: 1103a26-b2)

[…] τὰς δ' ἀρετὰς λαμβάνομεν ἐνεργήσαντες πρότερον, ὥσπερ καὶ ἐπὶ τῶν ἄλλων τεχνῶν· ἃ γὰρ δεῖ μαθόντας ποιεῖν, ταῦτα ποιοῦντες μανθάνομεν, οἷον οἰκοδομοῦντες οἰκοδόμοι γίνονται καὶ κιθαρίζοντες κιθαρισταί· οὕτω δὴ καὶ τὰ μὲν δίκαια πράττοντες δίκαιοι γινόμεθα, τὰ δὲ σώφρονα σώφρονες, τὰ δ' ἀνδρεῖα ἀνδρεῖοι.

Just as in the case of the crafts, we acquire the virtues by performing the activities that are characteristic of them. Aristotle thus subscribes to the following principles of *virtue acquisition* (VA) and *learning by doing* (LD):

VA We acquire virtue, *v*, only if we engage in the characteristic activities of *v*, e.g. we become virtuous by performing virtuous actions.

LD If φ-ing is something that we must learn to do (ποιεῖν), then one must learn to φ by φ-ing.

LD applies at least in the case of certain crafts, such as housebuilding and playing the kithara. VA may be understood as a special case of LD: acquiring virtue requires

performing virtuous actions, because part of what it is to be virtuous is to be able or have the disposition to perform virtuous actions.[183]

In *Nicomachean Ethics* 2.4, Aristotle returns to these proposals with a worry:

T5.2   But someone might be puzzled about how we say that one must become just by doing just things, and temperate by temperate things; for, if they do just and temperate things, they are already just and temperate, just as if they do grammatical things and musical things, they are grammatical and musical. (*EN* 2.4: 1105a17-21)

Ἀπορήσειε δ' ἄν τις πῶς λέγομεν ὅτι δεῖ τὰ μὲν δίκαια πράττοντας δικαίους γίνεσθαι, τὰ δὲ σώφρονα σώφρονας· εἰ γὰρ πράττουσι τὰ δίκαια καὶ σώφρονα, ἤδη εἰσὶ δίκαιοι καὶ σώφρονες, ὥσπερ εἰ τὰ γραμματικὰ καὶ τὰ μουσικά, γραμματικοὶ καὶ μουσικοί.

Most commentators understand Aristotle to be raising a challenge about the *possibility* of performing virtuous action prior to the acquisition of virtue: if one must be virtuous in order to engage in virtuous action, then how is it possible to become virtuous by doing virtuous things?[184] Alternatively, one might suppose that Aristotle is worried by the thought that performing virtuous action might be *all there is* to being virtuous. If so, then what more is there to being virtuous other than the performance of virtuous action? And what could one acquire through a process of practising virtuous action?[185] Whichever way we interpret it, this puzzle drives Aristotle to distinguish between the *mere* performance of virtuous action and performing virtuous action *virtuously*: as (ὡς) the virtuous person does them (1105b5-9). Aristotle thus formulates three agential conditions in order to distinguish the mere agent who performs virtuous actions, from the virtuous agent who performs virtuous actions virtuously:

---

[183] Performing the same activities is necessary but insufficient for both virtue acquisition and learning by doing: one must also perform them *well* (*EN* 2.1: 1103b6-14, 21-23).

[184] Irwin 1999: 195; Hardie 1968: 104; Williams 1995: 13; Vasilou 2007: 50-51, 2011: 173, Jimenez 2016.

[185] Hampson 2017: ch. 2.

T5.3   […] but the things brought into being in accordance with the virtues are not done justly or temperately if they [merely] have a certain quality themselves, but also if the agent acts having a certain quality – first, [i] if [they act] knowingly, next [ii] if [they are] choosing and choosing because of themselves [i.e. the actions], and, third, [iii] if they act having a stable and unmovable state. (*EN* 2.4: 1105a28-33)

[…] τὰ δὲ κατὰ τὰς ἀρετὰς γινόμενα οὐκ ἐὰν αὐτά πως ἔχῃ, δικαίως ἢ σωφρόνως πράττεται, ἀλλὰ καὶ ἐὰν ὁ πράττων πῶς ἔχων πράττῃ, πρῶτον μὲν ἐὰν εἰδώς, ἔπειτ' ἐὰν προαιρούμενος, καὶ προαιρούμενος δι' αὐτά, τὸ δὲ τρίτον ἐὰν καὶ βεβαίως καὶ ἀμετακινήτως ἔχων πράττῃ.

Aristotle thus demands three agential conditions for the virtuous performance of virtuous actions: (i) the epistemic condition, (ii) the motivational condition, and (iii) the stability condition. These three conditions are collectively intended to distinguish two ways of performing virtuous action – its mere performance from its virtuous performance – by pointing to differences in the agent.[186]

There are a number of challenges to offering a satisfying interpretation of Aristotle's puzzle and its solution. In the first case, interpreters have raised concerns about the process of development from non-virtuous agency to virtuous agency. The non-virtuous agent must either (i) fail to fulfil at least one of the conditions for virtuous agency or (ii) fulfil at least one in an attenuated sense. In the first case, suppose that the non-virtuous agent fulfils the epistemic condition but fails to fulfil both the motivational and stability conditions. A puzzle arises, however, as to how the non-virtuous agent could possibly come to acquire a disposition for virtuous motives from repeatedly performing virtuous actions without the correct motivation. Otherwise put, it's unclear how virtuous dispositions are supposed to

---

[186] This is not the only live interpretative option. Rather than supposing that Aristotle here distinguishes between non-virtuous and virtuous *agency*, some commentators interpret T5.3 as distinguishing between non-virtuous and virtuous *actions*. On this view, an action only counts as virtuous if it is performed by the virtuous agent. For a recent defence of this view, see Vasiliou 2011 (cf. Vasiliou 2007: 51, Hardie 1968: 104-105, Stewart 1892: 183, Joachim 1951: 79). I do not here defend the virtuous agency view (see Jimenez 2016: 18-24, Hirji forthcoming-a: §2.1, forthcoming-b: §2.2). It shouldn't matter for my purposes: what's important is that the qualities of the agent make a difference to the nature of the activity.

emerge from repeatedly performing virtuous actions in a non-virtuous way. However, if we suppose that the non-virtuous agent fulfils the agential conditions in some attenuated sense, then it's unclear how this sense should be specified such their actions aren't performed virtuously. What would it mean, for example, to almost or somewhat act with virtuous motivations?[187] A second interpretative difficulty concerns what Aristotle's three agential conditions in fact amount to. Aristotle does not elaborate on them (at least, not explicitly) and it has proved particularly difficult to establish what kind of knowledge the virtuous agent must exhibit or in what sense they must choose virtuous action for its own sake.[188]

I will not, however, engage with this first difficulty and will only touch on the second. What's important for my purposes, in the first case, is that Aristotle draws a clear distinction between the mere performance of virtuous action (in which none or only some of the agential conditions are fulfilled) and virtuous action performed virtuously (in which all three of the agential conditions are fulfilled). I expect that there is an interesting and important story to be told about the process by means of which one acquires virtue and transitions from mere to virtuous agency (in respect of both character virtue and intellectual virtue), but I won't consider it here. In the second case, I don't dwell on the details of the three agential conditions in the case of virtuous action, on the presupposition that the three agential conditions that apply in the case of theoretical intellectual virtue will not be direct analogues of the conditions for virtuous agency. Rather, I motivate the thought that there is *some sense* in which the theoretically wise person must (i) perform theoretically wise activities knowingly, (ii) choose to engage in those activities for their own sake, and (iii) engage in them from a stable state. I expect that a thorough comparison of the agential conditions in the case of character virtue and theoretical intellectual virtue would be rewarding, but I won't undertake it here.

---

[187] For a summary of this concern and bibliography, see Jiminez 2016: 8-11, Hampson 2017.

[188] See Kraut 1976, Williams 1995, Hursthouse 1995, Cooper 1996: 270-279, Whiting 2002, Taylor 2006: 84-93, Lawrence 2011: 265-276, Meyer 2016, Müller 2018: 167-175, Hirji forthcoming-a, forthcoming-b.

5.3. Motivating P1

5.3.1.   Challenges for motivating P1

I'll be motivating P1 in light of the fact that Aristotle's concern in *Nicomachean Ethics* 2.1 and 2.4 is not intellectual virtue (at least certainly not *theoretical* intellectual virtue), but virtues such as justice and temperance. Consequently, Aristotle is principally concerned with virtues pertaining to virtuous action rather than theoretical intellectual virtue pertaining to theoretical intellectual activities, such as grasping or contemplating theoretical truths. Indeed, Aristotle marks a clear distinction between virtue of character and virtue of thought at the beginning of 2.1:

T5.4   Virtue, then, is twofold: of thought and of character – that of thought has its origin and growth mostly from teaching, which is why it needs experience and time, and that of character comes from habit […] (*EN* 2.1: 1104a14-17)

Διττῆς δὴ τῆς ἀρετῆς οὔσης, τῆς μὲν διανοητικῆς τῆς δὲ ἠθικῆς, ἡ μὲν διανοητικὴ τὸ πλεῖον ἐκ διδασκαλίας ἔχει καὶ τὴν γένεσιν καὶ τὴν αὔξησιν, διόπερ ἐμπειρίας δεῖται καὶ χρόνου, ἡ δ' ἠθικὴ ἐξ ἔθους περιγίνεται […]

This passage follows immediately on from Aristotle's distinction between two parts of the soul (1.13: 1102b25-1103a10): virtues of character are virtues of the part of the soul that is non-rational (ἄλογος) but able to listen to and be persuaded by reason; virtues of thought, on the other hand, are virtues of the part of the soul that has reason 'properly and in itself' (κυρίως καὶ ἐν αὑτῶ, 1103a2). Given that Aristotle's account of virtue acquisition in 2.1 and 2.4 focuses on the acquisition of character virtue by means of habituation (i.e. virtue that pertains to action) we should be cautious about exporting his claims about virtue acquisition therein to the case of intellectual virtue and, particularly, to the case of theoretical intellectual virtue: virtue that pertains not to action but to theoretical thought.

However, a possible line of motivation for P1 can be found in T5.4, where Aristotle makes clear that intellectual virtues are acquired mostly through teaching. Aristotle's only other mention of teaching in these passages occurs in relation to the crafts (2.1: 1103b12-13). One might then motivate P1 by appeal to the thought that craft is not only taught but learned (1103a32-3), as are intellectual virtues such as demonstrative knowledge (*EN* 6.3: 1139b25-26) and theoretical wisdom.[189] Just as we become housebuilders by building houses, we might similarly become demonstrative knowers by demonstrating, and theoretically wise by performing theoretically wise activities. But in *Nicomachean Ethics* 2, Aristotle only subscribes to LD in the case of craft (T5.1). Just because both craft and theoretical intellectual virtue are learnt, doesn't entail that they are learnt by the same process; LD might only apply to craft learning and not to other types of learning. Indeed, Aristotle draws sharp distinctions between types of thought that are productive, practical, and theoretical (e.g. T4.3). One would need to specify the relevant similarities between productive and theoretical thought to support the inference that LD applies to theoretical wisdom as well as craft. What's more, Aristotle elsewhere distinguishes between an artisanal craftsperson (χειροτέχνης) and the master craftsperson (ἀρχιτέκτων) (*Met* 1.1: 981a12-b5). The artisanal craftsperson merely has experience and, in virtue of this, is a successful producer. However, they do not possess an account (λόγος) of their craft and so are unable to offer explanations of it. Aristotle thus compares artisanal workers to soulless things which act, but act in ignorance of what they are doing, e.g. as fire burns or stones fall. But whereas soulless things act by nature (φύσει) the artisanal craftsperson acts *because of habit* (δι' ἔθος) (981b2-5). This suggests that Aristotle's description of how we become house-builders and lyre-players in *Nicomachean Ethics* 2 might only apply to how we become skilled and experienced producers, in the sense of the artisanal craftsperson. This need not involve the acquisition of craft knowledge, i.e. the explanatory knowledge of the principles of one's craft characteristically possessed by the master craftsperson. As such, we are not warranted to infer that LD applies

---

[189] See also *Met* 1.1: 981b7-10, 1.2: 987a12-14, 29-30.

either to the acquisition of explanatory craft knowledge or theoretical intellectual virtue.

For these reasons, merely pointing to the fact that Aristotle compares the acquisition of virtue to the acquisition of craft is insufficient to establish P1. What's worse, motivating P1 in this way risks blocking P2. Having formulated the three agential conditions, Aristotle claims that it is sufficient for an act of skilful production that the agent only fulfils the epistemic condition. In the case of virtue, however, acting with knowledge is of little significance: the agent's motivation and the stable state of their character are paramount (*EN* 2.4: 1105a33-b-5). If intellectual virtue, then, is like craft, it may only be necessary that the wise person fulfils the first agential condition, and so does wise things with knowledge. In light of these concerns I turn to *Metaphysics* 9, where Aristotle offers further thoughts in favour of P1.[190]

5.3.2. Learning by reason

In *Metaphysics* 9.5, Aristotle distinguishes between three types of power:

T5.5 As all powers are either innate (e.g. the senses), by habit (e.g. that of flute playing), or by learning (e.g. that of the crafts), on the one hand it is necessary that we have those that come to be by habit and by reason having first been in activity, and, on the other hand, it is not necessary for those not of this sort and those which involve being acted upon. (*Met* 9.5: 1047b31-35)[191,192]

Ἁπασῶν δὲ τῶν δυνάμεων οὐσῶν τῶν μὲν συγγενῶν οἷον τῶν αἰσθήσεων, τῶν δὲ ἔθει οἷον τῆς τοῦ αὐλεῖν, τῶν δὲ μαθήσει οἷον τῆς τῶν τεχνῶν, τὰς μὲν ἀνάγκη προενεργήσαντας ἔχειν, ὅσαι ἔθει καὶ λόγῳ, τὰς δὲ μὴ τοιαύτας καὶ τὰς ἐπὶ τοῦ πάσχειν οὐκ ἀνάγκη.

---

[190] Buttaci (2016: 88-110) also turns to *Metaphysics* 9 and *Nicomachean Ethics* 2 in order to establish a principle equivalent to LD.

[191] Translations from *Metaphysics* 9 follow Makin 2006.

[192] Cf. *Met* 9.3: 1046b36-37.

Aristotle here makes clear that having first been in activity is not only necessary for acquiring powers that come about through habit, but also those that come to be by means of reason (λόγῳ). In so doing, Aristotle marks a clear distinction between acquiring the ability to play the flute through habit, on the one hand, and acquiring a craft by learning, on the other. This is reminiscent of Aristotle's distinction between the artisanal and master craftsperson: learning to play the flute is equivalent to merely becoming experienced and skilled at the performance of one's craft, whereas acquiring craft knowledge requires learning explanatory accounts by reason.[193] Similarly, then, we might suppose that other intellectual states, such as theoretical wisdom, are also acquired by reason and thus demand having first been in activity.

But this only goes some way to establishing P1. In T5.5, Aristotle does not insist that we acquire crafts and other rational powers by having previously engaged in the *same* activities that are characteristic of someone who possesses them, i.e. in the manner that we become just by doing just things. Given that Aristotle makes no mention of powers acquired by learning and reason in *Nicomachean Ethics* 2.1, we might be sceptical that intellectual virtues are developed by the very same model: even if it is the case that both character and intellectual virtue acquisition require having first been in activity, it might only be that character virtue and skill require having engaged in the *same* activities, and that intellectual virtue requires having engaged in *different* prior activities. For example, one might acquire demonstrative knowledge and non-demonstrative knowledge of first principles by having first engaged in activities of induction and defining, rather than activities of demonstrating and grasping first principles.[194]

Nonetheless, a consideration of the similarities between the distinctions Aristotle draws between different types of powers in *Nicomachean Ethics* 2.1 and *Metaphysics* 9.5, as well as a consideration of the context of both passages, provides reason to suspect that the *Nicomachean Ethics* model of virtue acquisition could

---

[193] On the relationship between the acquisition of craft knowledge and the acquisition of craft skill, see Johansen 2017.

[194] Cf. Bronstein 2016, Buttaci 2016: chs. 4-5.

apply to intellectual virtues acquired by learning and reason. To this end, I argue that Aristotle's distinction in *Metaphysics* 9.5 (T5.5) between (i) powers that are innate (e.g. the senses) and (ii) powers that are acquired by habit and reason (e.g. flute-playing, crafts), maps onto his distinction in *Nicomachean Ethics* 2.1 between (i) powers possessed by nature (e.g. perception, the stone's tendency to travel downwards) and (ii) those acquired by means of LD (e.g. house-building, kithara playing, character virtues) in *Nicomachean Ethics* 2.1.

5.3.3. One-way and two-way powers[195]

This mapping is not immediately obvious. In *Metaphysics* 9.5, Aristotle also distinguishes between rational and non-rational powers, according to which non-rational powers are one-way, being productive of just one thing, and rational powers are two-way, being productive of opposites (1048a8-10). For example, the power to heat is one-way because it is productive of just one thing: heat. The craft of medicine, however, is a two-way power because it can produce either health or illness: a skilled and knowledgeable doctor can choose either to heal their patient or to make them sick.[196] Now, Aristotle's description of the stone's tendency to fall and our natural power for perception, places both of these powers under the description of innate, one-way, and thus non-rational powers. But we might also place habitual powers in the same category, and for two reasons. First, they are acquired by habit and so are in this sense non-rational, i.e. they are not acquired by reason. Second, Aristotle makes clear in the *Nicomachean Ethics* that character virtues result in one type of action and not its opposite, e.g. justice is a state 'from which people are doers of just things' (ἀφ᾽ ἧς πρακτικοὶ τῶν δικαίων) and injustice is that from which we are doers of injustice (*EN* 5.1: 1129a6-11). Aristotle thus distinguishes powers and bodies of knowledge from virtuous states:

---

[195] This section draws heavily on Buttaci's (2016: 90-95) reasoning.

[196] See also *Met* 9.2: 1046a36-b15.

T5.6 For, things are not the same way in the case of both bodies of knowledge and powers [on the one hand] and in the case of states [on the other]. For, the same power or body of knowledge seems to be of contraries, but the contrary state is not of contraries, e.g. from health we do not do contrary [actions] but, rather, healthy ones only; for, we say that someone is walking healthily when they walk as the healthy person would. (*EN* 5.1: 1129a11-17)

οὐδὲ γὰρ τὸν αὐτὸν ἔχει τρόπον ἐπί τε τῶν ἐπιστημῶν καὶ δυνάμεων καὶ ἐπὶ τῶν ἕξεων. δύναμις μὲν γὰρ καὶ ἐπιστήμη δοκεῖ τῶν ἐναντίων ἡ αὐτὴ εἶναι, ἕξις δ' ἡ ἐναντία τῶν ἐναντίων οὔ, οἷον ἀπὸ τῆς ὑγιείας οὐ πράττεται τὰ ἐναντία, ἀλλὰ τὰ ὑγιεινὰ μόνον· λέγομεν γὰρ ὑγιεινῶς βαδίζειν, ὅταν βαδίζῃ ὡς ἂν ὁ ὑγιαίνων.

'The contrary state' here refers to either justice (being the contrary of injustice) or injustice (being the contrary of justice). Such states are not of contraries and so are one-way, because we only do one type of action in virtue of them. Given this, it looks as if Aristotle groups together innate powers and powers/states acquired by habit *together* as non-rational, one-way powers, and contrasts these with rational, two-way powers (e.g. crafts, bodies of knowledge). Given this apparent rift between (i) non-rational, habitual powers and (ii) rational, learned powers, we should be cautious about the extent to which the latter are acquired in the same way as the former.

It's important to note, however, that habitual powers are only one-way *once* they have been habituated. What distinguishes non-rational habitual powers from non-rational innate powers (e.g. the stone's nature or our power for perception) is that the latter are fixed from the get go, such that their possession does not require prior activity. However, craft skill and character virtue, although one-way once acquired, are initially indeterminate and in this sense two-way: just as one could acquire the virtue of justice *or* the vice of injustice, one could equally become good at house-building *or* bad at it. And we are capable of acquiring contrary states at least because we, unlike the stone, have the power to act in one of two contrary ways: doing just things *or* unjust things, building houses well *or* badly. Consequently, *prior to habituation and development*, both non-rational powers acquired by habit and rational powers acquired through learning and by reason, are

of contraries and thus two-way. The difference is that rational powers remain two-way after development and acquisition (see Table 5.1, below).[197]

	One-way or two-way?	Rational?
Innate powers e.g. perception, a stone's tendency to fall	One-way	Non-rational
Powers acquired by habit e.g. character virtues, artisanal crafts (house-building, flute-playing)	One-way (once habituated) Two-way (prior to habituation)	Non-rational
Powers acquired by reason e.g. explanatory craft knowledge, intellectual virtues(?)	Two-way	Rational

Table 5.1. Types of powers in *Metaphysics* 9.5

So, in *Nicomachean Ethics* 2.1 where Aristotle is principally concerned with the *acquisition* of character virtues (i.e. powers prior to development) it stands to reason that Aristotle there contrasts those non-rational powers acquired by habit (which are two-way at this stage) with innate, non-rational powers (which are one-way). But then it also stands to reason that Aristotle would class rational powers in the same two-way category as non-rational powers, because both are two-way *at this stage of development*. As such, we might suppose that powers acquired by reason and powers acquired by habit are acquired by the same mechanism (LD). And we can explain the fact that Aristotle is not explicit about this similarity in *Metaphysics* 9.5

---

[197] It might strike us as odd to suppose that craft skills are one-way once acquired. But, as noted, Aristotle supposes that the artisanal craftsperson acts through habit, like a soulless thing (*Met* 1.2: 981b2-5).

because there he's not so much concerned with the acquisition of powers, as with giving an account of powers *once acquired*.

5.3.4. *Prior activity and practising contemplators*[198]

We are given further reason in favour of this hypothesis in two passages from *Metaphysics* 9.8. In the first case, Aristotle argues that activity is prior in time to power:

T5.7 For, always, what is in activity comes to be from what is potentially, by means of what is in activity, e.g. human from human, musician by means of musician, always something bringing about change first; and what brings about change is already in activity. […] This is why it seems impossible to be a housebuilder having never built houses, or a kithara player having never played the kithara; for, the person who is learning to play the kithara, learns to play the kithara by playing the kithara, and similarly too for the others. From this arises the sophistic refutation, that someone who does not have knowledge does that which the knowledge is of; for, the learner does not have [the knowledge]. But because something of what is coming to be has come to be, and in general something of what is changing has changed […] perhaps it is also necessary that the learner has something of the knowledge. (*Met* 9.8: 1049b24-1050a12)

ἀεὶ γὰρ ἐκ τοῦ δυνάμει ὄντος γίγνεται τὸ ἐνεργείᾳ ὂν ὑπὸ ἐνεργείᾳ ὄντος, οἷον ἄνθρωπος ἐξ ἀνθρώπου, μουσικὸς ὑπὸ μουσικοῦ, ἀεὶ κινοῦντός τινος πρώτου· τὸ δὲ κινοῦν ἐνεργείᾳ ἤδη ἔστιν. […] διὸ καὶ δοκεῖ ἀδύνατον εἶναι οἰκοδόμον εἶναι μὴ οἰκοδομήσαντα μηθὲν ἢ κιθαριστὴν μηθὲν κιθαρίσαντα· ὁ γὰρ μανθάνων κιθαρίζειν κιθαρίζων μανθάνει κιθαρίζειν, ὁμοίως δὲ καὶ οἱ ἄλλοι. ὅθεν ὁ σοφιστικὸς ἔλεγχος ἐγίγνετο ὅτι οὐκ ἔχων τις τὴν ἐπιστήμην ποιήσει οὗ ἡ ἐπιστήμη· ὁ γὰρ μανθάνων οὐκ ἔχει. ἀλλὰ διὰ τὸ τοῦ γιγνομένου γεγενῆσθαί τι καὶ τοῦ ὅλως κινουμένου κεκινῆσθαί τι […] καὶ τὸν μανθάνοντα ἀνάγκη ἔχειν τι τῆς ἐπιστήμης ἴσως.

Two points are significant for my purposes. First, Aristotle invokes the same principles here as in *Nicomachean Ethics* 2.1: that we learn to play the kithara by

---

[198] This section employs similar reasoning to that of Buttaci's (2016: 102-109), arrived at independently.

playing the kithara. Indeed, he claims that it is apparently *impossible* to become a kithara player without having engaged in the activity of kithara playing. In this sense, the kithara player comes about by the agency of (ὑπό) the kithara player, where the latter may be understood either as a teacher who instructs, or perhaps as the learner who has engaged in the activity of playing the kithara and so, in that very act, come some way towards being a kithara player.

Second, even though Aristotle again focuses on the development of skilful performance (which, as argued, should not be equivocated with the acquisition of explanatory craft knowledge), the sophistic refutation is explicitly concerned with knowledge (ἐπιστήμη) and learning (μανθάνειν).[199] Knowledge, in particular, is most readily understood as a state of the properly rational part of the soul. Given that this refutation is meant to apply directly to the claim that the person who is learning to φ, learns to φ by φ-ing (LD), it seems clear that Aristotle also supposes that the person who is learning/acquiring knowledge, learns/acquires knowledge by doing things that are characteristic of that knowledge. They might, for example, perform activities that are characteristic of someone who knows, by truly asserting a demonstration. Of course, they won't do this in the way that the knower does (the recent-learner merely recites a demonstration, whereas a knower asserts it on the basis and as a manifestation of their understanding). But what's important is that the recent-learner's recitation of a demonstration is an instance of doing something knowledgeable, in the same sense that an unhabituated agent's just action is still a just action. If Aristotle did not subscribe to the view that we acquire knowledge by performing the *same* activities that are characteristic of knowledge, then he need not claim (albeit tentatively) that the learner already has something of the knowledge. Instead, he could have simply denied that the problem applies in the case of knowledge (e.g. because acquiring knowledge does not require engaging in the *same* activities as the knower) and instead formulated a response to the sophistic refutation as applied to the skills of housebuilding and kithara playing (where Aristotle definitely considers LD to apply). Indeed, Aristotle has a solution for such cases ready to hand: it's possible to play the kithara without having the skill of

---

[199] See also *SE* 4: 165b30-34, Plato *Euthydemus*: 275d–278b.

kithara playing, either by chance or under the instruction of a teacher (*EN* 2.4: 1105a21-26).[200]

Aristotle gives us yet further reason to suppose that LD applies in the case of theoretical learning in a passage that follows on from T5.7. Having argued that activity is prior to power in time, he goes on to argue that activity is also prior to power in being (οὐσία). In reverse order, Aristotle's first run of argument proceeds thus:

(1) Being in activity is an end (τέλος) for the sake of which power is acquired (1050a9-10);

(2) Everything that is coming to be advances towards and comes to be for the sake of a principle (ἀρχή), i.e. an end (1050a7-8);

(3) Therefore: activity is the end towards which and for which power comes to be. In this sense, power is prior in the process of coming to be;

(4) Beings that are posterior in the process of coming to be (e.g. adult humans) are prior in form and being to those prior in the process of coming to be (e.g. infant humans) (1050a4-5);

(5) Therefore: activity is prior in form and being.

I won't go into the details of this argument.[201] What's important for my current purposes is that Aristotle immediately illustrates premise (1) with a number of examples:

T5.8   [A] For it is not that animals see in order that they may have sight, but they have sight so that they may see, and likewise too they possess the housebuilding skill in order that they may build houses, and the

---

[200] Stephen Makin (2006: 189-192) notes that Aristotle's response to the sophistic refutation in T5.7 is different from his account of skill acquisition in *Nicomachean Ethics* 2.4 (cf. Jimenez 2016: 29-30). For my purposes, however, the differences are not important. What's significant is that Aristotle imagines a process by means of which we acquire knowledge (a theoretical intellectual state) by producing things that are characteristic of someone who knows).

[201] See Makin 2003, 2006: 192 *ff.*, Peramatzis 2011: 278 *ff.*

contemplative skill in order that they may contemplate; but it is not that they contemplate in order that they may have the contemplative skill, [B] except those who are practising; and they do not contemplate except in this way, or because they have no need to contemplate. (*Met* 9.8: 1050a10-14)

οὐ γὰρ ἵνα ὄψιν ἔχωσιν ὁρῶσι τὰ ζῷα ἀλλ' ὅπως ὁρῶσιν ὄψιν ἔχουσιν, ὁμοίως δὲ καὶ οἰκοδομικὴν ἵνα οἰκοδομῶσι καὶ τὴν θεωρητικὴν ἵνα θεωρῶσιν· ἀλλ' οὐ θεωροῦσιν ἵνα θεωρητικὴν ἔχωσιν εἰ μὴ οἱ μελετῶντες· οὗτοι δὲ οὐχὶ θεωροῦσιν ἀλλ' ἢ ὡδί, †ἢ ὅτι οὐδὲν δέονται θεωρεῖν†.[202]

Now, Aristotle has only just claimed that we become housebuilders, kithara players, and knowers by performing the characteristic activities of housebuilding, kithara playing, and knowing (T5.7). From this thought, it is a short step to suppose that we build houses in order to possess the house building skill. But in [A] of T5.8, Aristotle proposes the very opposite: we do not build houses in order to become housebuilders, but in order to build houses. As such, in [B] Aristotle offers a qualification: those who are practising contemplation, contemplate in order to become skilled contemplators. These practising contemplators only contemplate in a way (ὡδί) and do so in order to acquire the contemplative skill and thus be able to contemplate in the full or proper sense, i.e. as an end in itself.

In clearing up this potential worry, then, Aristotle is explicit that there are those who practise contemplation in order to acquire contemplative skill. Aristotle does not here insist that it is necessary to practise contemplation in order to become a skilled contemplator. Nonetheless, he adds the qualification about practice precisely because he has just claimed that we *must* build houses in order to become housebuilders. Plausibly, then, the practising contemplator and the practising housebuilder are similar, such that it is necessary that we contemplate in order to acquire contemplative skill, i.e. to become contemplators with the developed power

---

[202] Diels excises ἢ ὅτι οὐδὲν δέονται θεωρεῖν (cf. Ross 1924: ii. 262-263). The addition, whatever its sense, is not important for my purposes: the main lesson I take from this passage is that Aristotle supposes that we become skilled at contemplating by contemplating.

to contemplate well.[203] Note, also, the similarity between this passage and *Nicomachean Ethics* 2.4: the practising contemplator is said to contemplate but only in a certain way. A ready to hand way of describing the way in which the practising contemplator contemplates, is that they fail to practise as the skilled contemplator contemplates, i.e. as the wise person contemplates. And just as their practise is directed towards contemplative skill, the activity of the non-virtuous agent is directed towards performing virtuous actions virtuously.

These passages, I submit, give us positive reason to suppose that theoretical knowledge and contemplative skill are acquired according to LD, i.e. there are certain activities of knowing and being wise (of which contemplation is one) that we must learn to do, and we must learn to do them by doing them. This is in spite of the fact that Aristotle does not treat the acquisition of intellectual virtues in *Nicomachean Ethics* 2.1 and 2.4. Considerations from *Metaphysics* 9.5 and 9.8 make clear that we acquire intellectual powers through learning and reason, having first been in activity (T5.5). The sophistic refutation refines this idea, suggesting that we acquire knowledge not only having first been in activity, but engaging in the very activities that are characteristic of the person who knows (T5.7). Finally, Aristotle envisages that we contemplate in order to acquire the contemplative skill and distinguishes this way of practising contemplation from the developed activity of contemplation, which the former is directed towards (T5.8). Given this, it's clear that even though *Nicomachean Ethics* 2.4 treats a particular problem concerning habituation and the acquisition of virtue in respect of action, this problem has more general application, applying also to those powers acquired by reason and learning, e.g. theoretical intellectual virtue. In general, then, Aristotle commits to VA and LD, where these principles apply both to character virtues and theoretical intellectual virtue. As a consequence, both cases of virtue acquisition must face the puzzle raised in *Nicomachean Ethics* 2.4 (T5.2). In sum, then, I consider P1 to be sufficiently motivated.

---

[203] Similarly, the sophistic puzzle has most force if LD is applied to acquiring knowledge: we only become knowledgeable if we learn by doing the things that knowledge is of.

5.4. Motivating P2

5.4.1.   Challenges for motivating P2

With P1 motivated, it might seem straightforward to motivate P2. If VA and LD apply to theoretical wisdom, then we become theoretically wise by performing the same activities that are characteristic of wisdom, such as contemplation. Aristotle will thus face the very same worry raised in *Nicomachean Ethics* 2.4 (T5.2): if someone performs a wise activity, then they are already wise. If we presuppose that engaging in wise activities is all there is to being wise, then it's incoherent to claim that we become wise by engaging in wise activities. For, in virtue of performing wise activities, we are already wise. Alternatively, we might suppose that being wise is necessary to be able to perform wise activities. But if that's the case, then it's impossible to become wise by engaging in wise activities, because the learner would require the very power that they are trying to acquire. Whichever way we interpret the worry, Aristotle has at his disposal a distinction between merely engaging in wise activity and engaging in wise activity *wisely*, as the theoretically wise person does. Perhaps the wise person, then, performs wise activities *wisely and well* by fulfilling analogues of the three conditions that Aristotle places on virtuous action: the epistemic, the motivational, and the stability conditions (T5.3).

Such a proposal, however, faces two immediate concerns. First, in T5.3 Aristotle is explicitly concerned with virtuous action. For Aristotle, action and contemplation are distinct types of activity: one is practical and the other theoretical. Given this difference, we must be provided with further reason for the conclusion that analogues of all three of Aristotle's agential conditions for virtuous action are relevant to theoretical activity. Second, Aristotle is explicit that skilful production only requires that the producer fulfils the epistemic condition. Immediately after introducing the three agential conditions for virtuous actions, Aristotle remarks that:

T5.9   But with respect to having the other crafts, these [three agential conditions] are not taken into account, except the knowing itself; but with respect to the virtues, knowing is of little or no strength, but the others [i.e. choosing the action because of itself and acting from a stable state of character] are not of little [power], but of all power – these very things are acquired from doing just and temperate things many times. (*EN* 2.4: 1105a31-b5)

ταῦτα δὲ πρὸς μὲν τὸ τὰς ἄλλας τέχνας ἔχειν οὐ συναριθμεῖται, πλὴν αὐτὸ τὸ εἰδέναι· πρὸς δὲ τὸ τὰς ἀρετὰς τὸ μὲν εἰδέναι οὐδὲν ἢ μικρὸν ἰσχύει, τὰ δ' ἄλλα οὐ μικρὸν ἀλλὰ τὸ πᾶν δύναται, ἅπερ ἐκ τοῦ πολλάκις πράττειν τὰ δίκαια καὶ σώφρονα περιγίνεται.

In the case of craft production, the only criteria that the producer must fulfil in order that their production counts as skilful, is that they fulfil some version of the epistemic condition, e.g. in order to skilfully build a house, one's housebuilding must be a manifestation of one's knowledge and skill of housebuilding. And this, on Aristotle's view, is all that matters for skilful production: in order to skilfully build a house, one need not choose to build a house for the sake of housebuilding.[204] If one chooses to build a house for the sake of earning a living, this choice does not render one's house building unskilful. Indeed, Aristotle offers an initial response to the puzzle of virtue acquisition by distinguishing between mere and skilful performance of craft:

T5.10   For, it is possible to produce something grammatical either by chance or under the instruction of another. And so, he will be grammatical, then, if he produces something grammatical and [produces it] grammatically; and this is in accordance with the grammatical skill in him. (*EN* 2.4: 1105a21-26)

ἢ οὐδ' ἐπὶ τῶν τεχνῶν οὕτως ἔχει; ἐνδέχεται γὰρ γραμματικόν τι ποιῆσαι καὶ ἀπὸ τύχης καὶ ἄλλου ὑποθεμένου. τότε οὖν ἔσται γραμματικός, ἐὰν καὶ γραμματικόν τι ποιήσῃ καὶ γραμματικῶς· τοῦτο δ' ἐστὶ τὸ κατὰ τὴν ἐν αὑτῷ γραμματικήν.

---

[204] Cf. Müller 2018: 167-175.

To produce skilfully, then, it is only necessary that one's production is a manifestation of one's own knowledge and skill. But we might suppose that the same is true of theoretical activity. Recall Aristotle's recent-learner and the sophistic puzzle, in which someone does that which the knowledge is of. Aristotle answers the sophistic puzzle with the claim (albeit tentative) that the learner has something of the knowledge that they are learning. Perhaps, then, what the learner lacks is knowledge in the full or proper sense, like Aristotle's recent-learner: although the recent learner can say the words of a demonstration, they don't yet grasp it with knowledge and understanding, just as an apprentice housebuilder can partake in housebuilding, but not with the knowledge and skill of the master housebuilder. And similarly to the case of craft, perhaps the learner need not choose to produce knowledgeable things for the sake of that knowledge in order to count as knowledgeable. If a teacher chooses to do knowledgeable things for the sake of teaching students and earning a wage, this does not mean that their intellectual activities are performed un-knowledgeably. So if craft and theoretical knowledge are analogous in this sense, then we might think that the only thing that distinguishes *mere* theoretical intellectual activity from theoretical intellectual activity performed *wisely*, is that the latter is performed with full knowledge and understanding and the former is not. For example, it's plausibly the case that the only thing that distinguishes the mere contemplator (e.g. a practising contemplator) from the theoretically wise contemplator, is that the latter's contemplation is a manifestation of the fully honed contemplative skill inside them. On this view, the only difference between the mere and the theoretically wise contemplator is epistemic (perhaps some combination of knowledge-that and knowledge-how), such that theoretical wisdom demands neither that the agent fulfil a motivational or a stability condition.

In the following I respond to these concerns. I first characterise a disanalogy between craft and character virtue (§5.4.2), before arguing that theoretical wisdom is similarly disanalogous to craft and in this sense analogous to character virtue (§5.4.3). This blocks the thought that theoretical intellectual virtue only requires fulfilling the epistemic condition, at least on the grounds that intellectual virtue is

analogous to craft. I finally argue that Aristotle considered a love of wisdom to be characteristic of the theoretically wise person, such that they attribute final value to wisdom (§5.4.3). I continue this line of thought in the next chapter, where I establish P2 by arguing that the theoretically wise contemplator must choose to contemplate for its own sake in order to contemplate well. On this view, the fact that the theoretically wise person contemplates with virtuous motives is a manifestation of their love of wisdom; it will also be explanatory of the value of theoretical wisdom.

5.4.2. *A disanalogy between craft and character virtue*

In this section I detail a disanalogy between craft and character virtue invoked by Aristotle in *Nicomachean Ethics* 2.4, in relation to the doing-well (τὸ εὖ) of the things brought about by craft and in accordance with character virtue. In the next section, I argue that theoretical intellectual virtue is in fact disanalogous to craft in respect of its doing-well (and so analogous to character virtue in this respect). As such, we have reason to suppose that fulfilling agential conditions in the case of theoretical intellectual activity is not only essential for engaging in theoretical intellectual activities wisely, i.e. in the sense that a producer only produces skilfully if they do so with knowledge. In addition, theoretical intellectual activity does not achieve its good (i.e. its doing well) unless the person engaging in that activity fulfils certain agential conditions. This is similarly true in the case of character virtue, but not so in the case of craft.

Just before he enumerates the three agential conditions for virtuous action, Aristotle introduces a disanalogy between craft and character virtue as follows:

T5.11   Besides, the case of the crafts is not like that of the virtues; for, the doing-well of things brought into being by the crafts is in [the things] themselves; and so, it suffices that [they] are brought into being having a certain quality; but the things brought into being in accordance with the virtues are not done justly or temperately if they [merely] have a certain quality themselves, but also if the agent acts having a certain quality […] (*EN* 2.4: 1105a26-31)

ἔτι οὐδ' ὅμοιόν ἐστιν ἐπί τε τῶν τεχνῶν καὶ τῶν ἀρετῶν· τὰ μὲν γὰρ ὑπὸ τῶν τεχνῶν γινόμενα τὸ εὖ ἔχει ἐν αὑτοῖς· ἀρκεῖ οὖν ταῦτά πως ἔχοντα γενέσθαι· τὰ δὲ κατὰ τὰς ἀρετὰς γινόμενα οὐκ ἐὰν αὐτά πως ἔχῃ, δικαίως ἢ σωφρόνως πράττεται, ἀλλὰ καὶ ἐὰν ὁ πράττων πῶς ἔχων πράττῃ […]

Aristotle's remark about craft can't be that making a good product is sufficient for that product having been produced skilfully.[205] After all, he goes on to suggest that skilful production requires that the agent acts with knowledge (T5.9). Indeed, it would be farfetched to claim that if a novice produced something musical on the kithara by chance (e.g. something tuneful, rhythmical, with good timbre, etc. in virtue of a hand spasm) then they produced it skilfully: it's not a manifestation of their skill. Rather, Aristotle claims that the doing-well of the product of craft depends solely on the intrinsic properties of the product, e.g. the sturdiness of a house, tunefulness of a piece of music, fluidity of a dance, etc.[206] In so doing, Aristotle cleaves apart the question of whether a product is produced skilfully (i.e. by someone who manifests knowledge and skill) from that of whether the product is good. Compare, for example, a good coffee produced by a skilled barista and a good coffee produced by a machine or by accident. Suppose that both coffees are equally good in so far as they have identical intrinsic properties. The fact that one was made by a skilled barista adds no value to the coffee itself. As such, it's possible that a product of craft can be good without it having been a manifestation of skilful production.

This claim stands in need of some defence. After all, we do sometimes value products that are skilfully produced more than the very same products that were

---

[205] Broadie 1991: 83.

[206] Cf. Jimenz 2016: 15-16, who offers an alternative interpretation, according to which Aristotle's point is that a product is good when it is produced 'by the crafts' (ὑπὸ τῶν τεχνῶν), i.e. as opposed to by chance. On this view, a product is good if it is produced by the crafts (i.e. skilfully) and Aristotle is pathing the way for the thought that virtue of character requires more than skill, but also virtuous choice and a stable state of character. However, given that Aristotle claims that the product of the crafts have their goodness in themselves (ἐν αὑτοῖς), I take it that a craft product can be good despite being the product of chance. See also *Met* 9.8: 1050a30-b2.

not the product of skill. And we do so in virtue of the fact that they are skilfully produced. For example, one might plausibly value a painting produced by a skilled artist more than a painting with identical intrinsic properties produced by a machine or by accident. In this case, the extrinsic property of being skilfully produced adds value to the product – it is because of this that we value the painting more – and this value is not instrumental on the intrinsic properties of the product.[207] But Aristotle's point in T5.11 is merely that the product being good is *sufficient* for the doing-well of craft. For example, if a novice painter produced a beautiful painting by chance (e.g. by accidentally spilling paint onto the canvas) then the painting would be sufficiently good *qua* product of craft simply in virtue of its beauty. This is consistent with us ascribing greater value to an identical painting that has been skilfully produced. It is then up to Aristotle to decide whether this additional value is mistakenly ascribed, or to explain this additional value by other means.[208]

Aristotle thus marks a sharp distinction between productions and actions. The products of craft are good in virtue of their intrinsic properties, such that the doing well of craft does not depend upon the process that produced it. In terms that Aristotle will later use in *Nicomachean Ethics* 6.5, the goal of production is the product, which is something distinct from the process of production. This is not so in the case of action, the goal of which cannot be distinguished from the action itself:

T5.12 […] and [practical wisdom cannot be] craft because action and production are of different kinds. It remains, therefore, that it is a true state with reason, a practical one, concerned with what is good and bad for a human being. For, the end of production is something other [than production], while that of action is not [something other than action]; for, good-action is itself an end. (*EN* 6.5: 1140b3-7)[209]

---

[207] See also Brogaard 2007.

[208] Cf. Irwin 1999: 195-196.

[209] Cf. *EN* 6.4: 1140a2-5

[…] τέχνη δ' ὅτι ἄλλο τὸ γένος πράξεως καὶ ποιήσεως. λείπεται ἄρα αὐτὴν εἶναι ἕξιν ἀληθῆ μετὰ λόγου πρακτικὴν περὶ τὰ ἀνθρώπῳ ἀγαθὰ καὶ κακά. τῆς μὲν γὰρ ποιήσεως ἕτερον τὸ τέλος, τῆς δὲ πράξεως οὐκ ἂν εἴη· ἔστι γὰρ αὐτὴ ἡ εὐπραξία τέλος.

Sarah Broadie makes a number of important points about Aristotle's claim that production and action are of different kinds. In the first case, it cannot be that Aristotle distinguishes between production and action in virtue of the fact that, on the one hand, products are ontologically independent from the process of production (e.g. the house produced by the act of house-building) and, on the other, actions are ontologically dependent on the activity of acting.[210] Indeed, productive arts such as kithara playing and dancing produce no such ontologically independent products. Similarly, we might equally claim that actions often produce ontologically independent artefacts in the form of lasting consequences. Consequently, the sense in which craft has an end other than production, cannot be that craft produces ontologically independent products whereas actions do not (Broadie 1991: 208). Rather, reading T5.12 in light of T5.11, Aristotle's distinction is an evaluative one. That the product of a craft is in a good condition is sufficient for its being good *qua* craft product. This is because the goal of production is the product, something distinct from the process of production. If two paintings have identical intrinsic properties, one produced by a machine and the other by a skilled artist, both are equally good because their goodness is independent from the process of production. In Broadie's terms, the product is 'an independent standard by which to judge producing and the producer' (Broadie 1991: 208). If, as Broadie imagines, good shoes grew on trees, the means of production would not detract from the goodness of the shoes so produced. Rather, we evaluate the means of production in terms of the goodness of the product (i.e. in terms of the goodness of its end), such that a means of production is as good as the product it produces.[211]

---

[210] Nightingale (2004: 200-201) mistakenly interprets the productive/practical distinction along such lines.

[211] I take it that Broadie's evaluative reading of the πρᾶξις-ποίησις distinction is consistent with interpretations that understand Aristotle's πρᾶξις-ποίησις distinction in terms of his ἐνέργεια-κίνησις distinction (*Met* 9.6). This is in spite of the fact that

As Aristotle proposes, however, this is not so in the case of action. It is not possible to distinguish between the goal of action and the action itself, because good action (εὐπραξία) is the goal of action. Consequently, the way in which the action is performed (i.e. whether it is performed virtuously of not) is a constitutive part of the goodness of the act, such that there is a significant evaluative difference between an action that is the virtuous thing to do and the same action performed virtuously. This is not to claim that mere performance of virtuous action isn't in some sense good; but there is more to virtue and doing well in action than merely performing virtuous action, such that performing virtuous action virtuously is both better and necessary for doing well *qua* action. This is not true in the case of craft: skilful production is neither necessary for nor constitutive of the goodness of its product, such that a beautiful piece of kithara playing is good if the sound is beautiful, regardless of whether it is the product of skill.

5.4.3. *The analogy between character virtue and theoretical virtue*

As proposed, we have reason to suppose that theoretical intellectual activity is analogous to virtuous action and disanalogous to craft when it comes to its doing-well. In *Nicomachean Ethics* 10.6, Aristotle recapitulates several criteria of happiness: it must be an activity rather than a state (1176a33-b2); it is choiceworthy according

---

Broadie might wish to resist such readings (Broadie 1991: 260 n.17). For reasons suggested by Charles 1986, I'm inclined to suppose that Aristotle needs a strong ontological distinction between πρᾶξις and ποίησις, and this is readily offered with the ἐνέργεια-κίνησις distinction of *Metaphysics* 9.6 (cf. Müller 2018: 166). However, I'm also disinclined to suppose that Aristotle draws a hard distinction between the ontological and the normative/evaluative. As such, I suppose that Aristotle is a realist about the evaluative differences between craft and action, and that these differences might well be underpinned by ontological differences between craft and action, e.g. *qua* change and activity. Thus, I do not suppose that Aristotle's evaluative distinction between actions and productions is such that the same event can be either an action or a production, depending on how one evaluates it (for this view, see Ackrill 1978: 595, Heinaman 1996: 103, Angier 2010: 44). Arguing for this view is beyond my present purposes. Suffice to say, Aristotle is clear that actions and productions are distinguished by the nature of their goals and so their doing-well.

to itself and not because of something else (1176b2-5); and, as such, 'happiness lacks nothing but is self-sufficient' (1176b5-6).[212] Aristotle thus elaborates:

T5.13 And the ones that are choiceworthy according to themselves are those from which nothing is sought beside the activity. And actions in accord with virtue seem to be like this; for, doing fine and excellent things is among the things that are choiceworthy because of themselves. (*EN* 10.6: 1176b6-9)

καθ' αὑτὰς δ' εἰσὶν αἱρεταὶ ἀφ' ὧν μηδὲν ἐπιζητεῖται παρὰ τὴν ἐνέργειαν. τοιαῦται δ' εἶναι δοκοῦσιν αἱ κατ' ἀρετὴν πράξεις· τὰ γὰρ καλὰ καὶ σπουδαῖα πράττειν τῶν δι' αὑτὰ αἱρετῶν.

Note that this is not merely a comment on the motivations of the virtuous agent, but also the evaluative status of virtuous action. Virtuous agents, Aristotle repeatedly claims, perform virtuous actions for the sake of the fine (τὸ καλόν).[213] As C.C.W. Taylor puts it, virtuous agents choose to perform virtuous actions because 'being instances of this virtue or that are different ways of being fine' (Taylor 2006: 87). This is in contrast to the vicious person, who acts for the sake of themselves (*EN* 9.8: 1168a31). But not only do virtuous agents choose fine and excellent actions because of the actions themselves, such actions *are* choiceworthy for their own sake precisely because they are fine.

Aristotle leverages this characteristic of happiness in *Nicomachean Ethics* 10.7, in support of the claim that theoretically wise contemplation is an activity of complete or perfect happiness:

T5.14 Moreover, it [i.e. contemplation] alone would seem to be loved because of itself; for, nothing comes to be from it beside having contemplated, but from practical [activities] we make for ourselves [something] larger or smaller beside the action. (*EN* 10.7: 1177b1-4)

---

[212] οὐδενὸς γὰρ ἐνδεὴς ἡ εὐδαιμονία ἀλλ' αὐτάρκης

[213] E.g. *EN* 3.6: 1115b12-13, 23, 3.7: 1116a11-15, b3, 3.8: 1116b31, 1117a8, b9, 1120a23-24, 1122b6-7, 4.2: 1123a24-26, 9.8: 1168a33-34, *EE* 3.1: 1230a27-29, 8.15: 1248b36-37. See also Richardson Lear 2004: ch.6, 2006, Irwin 2010.

δόξαι τ' ἂν αὐτὴ μόνη δι' αὑτὴν ἀγαπᾶσθαι· οὐδὲν γὰρ ἀπ' αὐτῆς γίνεται παρὰ τὸ θεωρῆσαι, ἀπὸ δὲ τῶν πρακτικῶν ἢ πλεῖον ἢ ἔλαττον περιποιούμεθα παρὰ τὴν πρᾶξιν

At first glance, Aristotle takes an about turn on his claim that good action has no goal other than itself (T5.12): when we act, we in fact produce something for ourselves in addition to the action. But we can plausibly read T5.12 and T5.14 without tension. As argued, T5.12 does not claim that action doesn't produce any ontologically independent consequences. Indeed, both action and production are capable of producing changes in the world that persist and outlive the process of producing or acting. Rather, the goodness of production depends solely on the intrinsic properties of the product produced, whereas the goodness of an action depends on the action and how it is performed, where the properties of the agent determine the way the action is performed and thus are in part constitutive of the goodness of the action itself. As a good product is sufficient for the doing-well of craft products (T5.11), a good action performed well is sufficient in the case of action (T5.12). Nonetheless, actions do indeed produce consequences other than the action itself, and these consequences provide *additional* reason to love the action (T5.14). For example, if someone were to repair an elderly person's greenhouse because it is the generous thing to do, but an earthquake demolished it weeks later, having repaired the greenhouse would still have been the good and virtuous thing to do. This is in spite of the fact that many of its potential good consequences will not occur. Nonetheless, it would have been better if the good consequences had occurred. As such, in performing virtuous actions we produce something for ourselves beside the actions, as long as the external conditions are right – and these provide reasons to love the action, in addition to the action itself.[214]

In this sense, then, contemplation is strongly disanalogous to the case of craft production: contemplation is such that nothing comes from contemplating

---

[214] See also *EN* 10.7: 1177b16-20. For extended discussion, see Whiting 2002, Hirji forthcoming-b.

other than having contemplated.[215] Indeed, Aristotle elsewhere makes clear that contemplation is such that, at every moment of contemplating, one is contemplating and has contemplated (*Met* 9.6: 1048b18-35). As such, it's not possible to distinguish between the activity of contemplating and its proper end, in the manner that Aristotle distinguishes between the means or process of production and its end (i.e. the product). And in this sense, contemplation is like action – its end cannot be distinguished from the activity – such that contemplating and acting well are ends in themselves. Consequently, we have reason to suppose that the way that contemplation is performed is in part constitutive of the goodness of the contemplative activity, just as the way that an action is performed is in part constitutive of the goodness of the action. We have reason, then, to suppose that the qualities of the contemplator in part constitute the goodness of the contemplative activity.

This gets me some of the way towards P2. What I need, however, is to secure the thought that contemplation done well requires that the contemplator fulfils analogues of all three agential conditions. I take considerations in this and the previous chapter as sufficient to secure both the epistemic and the stability condition. In the first case, theoretically wise contemplation requires that the contemplator contemplates with knowledge and understanding, i.e. with contemplative skill (T5.8). This is analogous to the sense in which skilful craft production requires that the producer produces in accordance with the knowledge and skill within them (T5.11). In the second case, Aristotle is clear that knowledge requires stability (T4.10). I also argued that contemplative activity must be performed from a stable state if it is to be continuous and so be constitutive of its ultimate goodness, i.e. as an activity of complete or perfect happiness (§5.4.4). Given this, in what follows I focus solely on motivating the thought that the theoretically wise contemplator must also fulfil an analogue of the motivational condition, i.e. that they contemplate wisely and well only if they choose the activity of

---

[215] Here Aristotle has in mind the contemplation of an accomplished (i.e. theoretically wise) contemplator. Something *does* come to be from the practise of the unskilled contemplator, i.e. contemplative skill.

contemplation for its own sake. This will take additional work in Chapter 6, where I return to *Nicomachean Ethics* 10.7-8 in order to give an account of how fulfilling the motivational condition transforms theoretical contemplation into something good for the contemplator. For now, I turn to passages in *Metaphysics* 1 and *Nicomachean Ethics* 6. My aim at this stage is to argue that Aristotle apparently considers a love of wisdom to be either necessary for or characteristic of theoretical wisdom. This will lay the foundations for my eventual claim that the theoretically wise contemplator contemplates with virtuous motivations: they choose to contemplate for its own sake because they are lovers of wisdom, such that they ascribe final value to the proper activities of theoretical wisdom.

5.4.4.   Loving wisdom as a characteristic of theoretical wisdom

In *Metaphysics* 1.1, Aristotle argues that wisdom is knowledge of certain first principles and causes (ἐπιστήμη περί τινας ἀρχὰς καὶ αἰτίας, 982a2). In 1.2, Aristotle sets out to determine what sort of first principles and causes wisdom is of (982a4-6). To this end, Aristotle describes six notions that we have about the wise person and their wisdom. The fifth is as follows:

T5.15   […] and of the bodies of knowledge, also, [we suppose] that which is choiceworthy on account of itself, i.e. for the sake of knowing, to be wisdom more than that which is [choiceworthy] on account of what results from it (*Met* 1.2: 982a14-16)

   […] καὶ τῶν ἐπιστημῶν δὲ τὴν αὑτῆς ἕνεκεν καὶ τοῦ εἰδέναι χάριν αἱρετὴν οὖσαν μᾶλλον εἶναι σοφίαν ἢ τὴν τῶν ἀποβαινόντων ἕνεκεν

A characteristic of wisdom, then, is that it is choiceworthy for its own sake, simply for the sake of knowing. Aristotle contrasts this with bodies of knowledge that are choiceworthy on account of what results from them. What might Aristotle have in mind? On the one hand, the results might be practical or useful consequences of a body of knowledge, e.g. in the manner that astronomical knowledge might be

practically useful for navigation.[216] On the other hand, a body of knowledge might be desirable because of its epistemic results, e.g. if one body of knowledge (e.g. geometry) is capable of explaining another body of knowledge (e.g. optics), then the former may be desired in virtue of what follows from it. Wisdom certainly has the latter characteristic: Aristotle also supposes that the wise person knows all things (982a8-10), in so far as wisdom is the most universal knowledge and 'everything that falls under it is known by him [i.e. the wise man] in a way' (982a23).[217] As such, there is a sense in which wisdom has epistemic utility: the wise person knows other things (or knows them better) in virtue of their wisdom.[218]

Now, Aristotle certainly thinks that theoretical wisdom isn't choiceworthy in virtue of its practical or productive usefulness (on this, see below). And Aristotle's response to the fifth supposition about wisdom makes clear that wisdom isn't choiceworthy in virtue of its epistemic utility either:

T5.16   And knowing and being knowledgeable for the sake of themselves belong most of all to knowledge of what is most knowable (for, he who chooses to know because of itself will choose most of all what is most knowable, and such is the [knowledge] of what is most knowable), but the primary things and the causes are most knowable (for, because of these and from these the others are known, but these are not [known] because of that which fall under [them]) […] (*Met* 1.2: 982a30-b4)

τὸ δ' εἰδέναι καὶ τὸ ἐπίστασθαι αὐτῶν ἕνεκα μάλισθ' ὑπάρχει τῇ τοῦ μάλιστα ἐπιστητοῦ ἐπιστήμη (ὁ γὰρ τὸ ἐπίστασθαι δι' αὐτὸ αἱρούμενος τὴν μάλιστα ἐπιστήμην μάλιστα αἱρήσεται, τοιαύτη δ' ἐστὶν ἡ τοῦ μάλιστα ἐπιστητοῦ), μάλιστα δ' ἐπιστητὰ τὰ πρῶτα καὶ τὰ αἴτια (διὰ γὰρ ταῦτα καὶ ἐκ τούτων τἆλλα γνωρίζεται ἀλλ' οὐ ταῦτα διὰ τῶν ὑποκειμένων) […]

Aristotle thus sets out to identify wisdom by determining the type of knowledge that is properly for the sake of itself (the *desideratum* of T5.15), first claiming that

---

[216] Though it's unclear in what sense demonstrative astronomical knowledge could be put to such use.

[217] οὗτος γὰρ οἶδέ πως πάντα τὰ ὑποκείμενα

[218] See also *APo* 1.13: 78b35 *ff.*

such knowledge is knowledge of what it most knowable. This is explained, in turn, by an observation: the person who chooses to know just for the sake of knowing, chooses most of all knowledge that is most knowable. Aristotle then claims that the primary things and causes are most knowable, in virtue of the fact that we know other things because of and from them. This stands in favour of Aristotle's claim that wisdom is knowledge of primary things and causes. But note that, on this account, wisdom clearly has epistemic results: because of and from wisdom, we know other things (and not vice versa). Nonetheless, Aristotle here maintains that wisdom is choiceworthy because of itself and *not* because of what results from it. What Aristotle must have in mind, then, is that in spite of wisdom's epistemic utility (i) wisdom is nonetheless choiceworthy because of itself (because it is most knowable) and (ii) it is characteristic of the wise person that they choose wisdom primarily on account of itself and not in virtue of the fact that it makes other things known. Accordingly, if one were to value wisdom primarily on account of its epistemic utility (i.e. in order to know other things), one would fail to value wisdom as the wise person does and, in turn, fail to appreciate the sense in which the proper objects of wisdom are finally valuable. Note, however, that one could plausibly know the objects of wisdom but nonetheless choose to know them for the sake of knowing that which results from them, e.g. in the manner that we might seek an explanation in order to know the *explicandum* better. This suggests that it is characteristic of the wise person that they (appropriately) ascribe final value to the proper objects of theoretical wisdom – they do not choose wisdom for the sake of its epistemic results.

Indeed, we reach similar conclusions if we consider the sense in which wisdom is purportedly useless. In *Nicomachean Ethics* 6.7, Aristotle tells us that:

T5.17 From what has been said, then, it is clear that theoretical wisdom is both knowledge and intellect of that which are most estimable by nature. This is why Anaxagoras, Thales, and those sorts of people, are said to be theoretically but not practically wise, when they see that they are ignorant of things that are advantageous to themselves, and they say that they know

things that are exceptional, wondrous, difficult, and divine – but useless, because they do not inquire into human goods. (*EN* 6.7: 1141b2-8)[219]

ἐκ δὴ τῶν εἰρημένων δῆλον ὅτι ἡ σοφία ἐστὶ καὶ ἐπιστήμη καὶ νοῦς τῶν τιμιωτάτων τῇ φύσει. διὸ Ἀναξαγόραν καὶ Θαλῆν καὶ τοὺς τοιούτους σοφοὺς μὲν φρονίμους δ' οὔ φασιν εἶναι, ὅταν ἴδωσιν ἀγνοοῦντας τὰ συμφέροντα ἑαυτοῖς, καὶ περιττὰ μὲν καὶ θαυμαστὰ καὶ χαλεπὰ καὶ δαιμόνια εἰδέναι αὐτούς φασιν, ἄχρηστα δ', ὅτι οὐ τὰ ἀνθρώπινα ἀγαθὰ ζητοῦσιν.

Whereas practical wisdom contemplates the good for each type of being (1141a25-26), theoretical wisdom is concerned with objects that are by nature most estimable, such as the divine beings from which the universe is composed (1141a34-b2). This explains what is said about Anaxagoras and Thales: that they are ignorant of what is advantageous to themselves and that what they know is useless. Wisdom is characteristically useless, then, because it does not consider what is good, beneficial, or advantageous for humans – both individuals and the human species. Practical wisdom, on the other hand, is concerned with human affairs and successfully deliberates about the practicable human good.[220]

But we might wonder whether any type of knowledge is in fact useless. Aristotle's example of Thales is notable.[221] In the *Politics* (1.11: 1259a5-23), Aristotle tells us that Thales had apparently been reproached for his poverty – a sure sign that philosophy is of no benefit – and so amassed a large sum of money so as to prove his detractors wrong. Using his astronomical knowledge, Thales was said to have predicted that a good olive harvest was on its way. He thus purchased all of the available olive presses and rented them out at a high price when the crop came around. Having created a monopoly, Thales 'collected much money, showing that it

---

[219] See also *Met* 1.1: 981b13-25, 1.2: 982a30-b4, b11-28.

[220] See also *EN* 6.5: 1140a25-28, b4-6, 7-10, 19-21.

[221] On Anaxagoras, see *EN* 10.8: 1179a13-16, *EE* 1.4: 1215b6-14, 1.5: 1216a10-16

is easy for philosophers to become wealthy, if they wish, but this is not what they are earnest about' (1259a16-18).[222]

Aristotle's telling of Thales' story is suggestive that knowledge of the heavens – just the kind of knowledge that the theoretically wise person would possess – can indeed be put to use. Of course, it might be objected that Thales is not in fact putting his theoretical wisdom to use, but rather his experiential knowledge of particulars.[223] But we can nonetheless imagine cases in which theoretical wisdom is made useful. Aristotle is clear that the power to teach is distinctive of the theoretically wise person (*Met* 1.1: 981b7-10, 1.2: 982a12-14). And a theoretically wise person could very plausibly make money in virtue of teaching, just as long as there are people who want to learn. We might think, then, that the uselessness of wisdom is as much a characteristic of the wise person's relationship to their wisdom, as it is a bare characteristic of wisdom itself: such knowledge can be put to use, but it is not characteristic of the theoretically wise person to do so. Rather, the theoretically wise person is the kind of person who loves wisdom for its own sake, such that they ascribe final value to their knowledge. As Aristotle notes of Thales: making money from wisdom is not what the philosopher is earnest about. This case similarly suggests, then, that it is characteristic of the wise person that they occupy a particular evaluative stance with respect to their wisdom, i.e. they are a lover of wisdom, such that they choose to know the objects of wisdom because of themselves and don't value them in virtue of whatever utility they might have (be it practical or epistemic).

This is further corroborated by another passage in *Metaphysics* 1.2, in which Aristotle argues that wisdom is not productive:

T5.18 And that it [i.e. wisdom] is not productive is also clear from those who first loved wisdom; for, both then and also now, humans first began to love wisdom because of wonder – from the beginning they wondered at the

---

[222] […] πολλὰ χρήματα συλλέξαντα ἐπιδεῖξαι ὅτι ῥᾴδιόν ἐστι πλουτεῖν τοῖς φιλοσόφοις, ἂν βούλωνται, ἀλλ' οὐ τοῦτ' ἐστὶ περὶ ὃ σπουδάζουσιν. (Trans. following Reeve 1998)

[223] Cf. *Met* 1.1: 981a13-23.

strange things that were ready to hand, and then they advanced in this manner, little by little, and raised puzzles about the greatest of things, e.g. about both the happenings of the moon, those of the sun and stars, and about the genesis of the universe. And he who is puzzled and wonders, thinks himself ignorant (and, for this reason, the lover of stories is somehow a lover of wisdom; for stories are composed from wonders); as a consequence, if indeed they loved wisdom because they took flight from ignorance, it is clear that they pursued knowledge for the sake of knowledge, and not on account of some usefulness. (*Metaphysics* 1.2: 982b11-21)

Ὅτι δ' οὐ ποιητική, δῆλον καὶ ἐκ τῶν πρώτων φιλοσοφησάντων· διὰ γὰρ τὸ θαυμάζειν οἱ ἄνθρωποι καὶ νῦν καὶ τὸ πρῶτον ἤρξαντο φιλοσοφεῖν, ἐξ ἀρχῆς μὲν τὰ πρόχειρα τῶν ἀτόπων θαυμάσαντες, εἶτα κατὰ μικρὸν οὕτω προϊόντες καὶ περὶ τῶν μειζόνων διαπορήσαντες, οἷον περί τε τῶν τῆς σελήνης παθημάτων καὶ τῶν περὶ τὸν ἥλιον καὶ ἄστρα καὶ περὶ τῆς τοῦ παντὸς γενέσεως. ὁ δ' ἀπορῶν καὶ θαυμάζων οἴεται ἀγνοεῖν (διὸ καὶ ὁ φιλόμυθος φιλόσοφός πώς ἐστιν· ὁ γὰρ μῦθος σύγκειται ἐκ θαυμασίων)· ὥστ' εἴπερ διὰ τὸ φεύγειν τὴν ἄγνοιαν ἐφιλοσόφησαν, φανερὸν ὅτι διὰ τὸ εἰδέναι τὸ ἐπίστασθαι ἐδίωκον καὶ οὐ χρήσεώς τινος ἕνεκεν.

Aristotle's argument proceeds as follows:

1. Lovers of wisdom love/pursue wisdom because they wonder;

2. Someone who wonders (and is puzzled) considers themselves ignorant;

3. Someone who seeks knowledge because they consider themselves ignorant, seeks knowledge for its own sake;

4. So: lovers of wisdom love wisdom for its own sake;

5. If wisdom is loved/pursued for its own sake, then it is not loved/pursued for some usefulness;

6. So: lovers of wisdom do not love/pursue wisdom for some usefulness;

7. If some knowledge is productive, then it is loved/pursued for its usefulness;

8. So: the wisdom that lovers of wisdom love is not productive.

Two important points can be taken from this argument. First, Aristotle argues that wisdom is not productive through a consideration of lovers of wisdom. An implicit

assumption, then, is that being a lover of wisdom is characteristic of the pursuit and acquisition of wisdom. Second, for Aristotle's argument to work it cannot be the case that those who possess productive knowledge, pursued that knowledge because they experienced wonder and puzzlement. If this were so, then productive knowledge could plausibly be pursued for its own sake over and above its usefulness (rendering premise (7) false). Consequently, the phenomenon of wonder must properly belong to the lover of wisdom, such that it is only the lover of wisdom who considers themselves ignorant and so wants to know solely for the sake of knowing. Here, again, Aristotle talks as if a love of wisdom is characteristic of those who pursue theoretical wisdom, in virtue of which they seek theoretical wisdom for its own sake.

In sum, then, Aristotle characterises both those who are theoretically wise and those who are in pursuit of theoretical wisdom as lovers of wisdom. On this view, ascribing final value to theoretical wisdom is characteristic of the theoretically wise person. Indeed, Aristotle talks as if loving theoretical wisdom is essential to being theoretically wise. I'll assess this claim over the course of the next two chapters. In Chapter 6, I argue that loving wisdom is necessary to achieve the good of contemplative activity: in virtue of being a lover of wisdom, the theoretically wise person chooses to contemplate for its own sake (thus establishing P2) and takes maximal pleasure in their contemplative activity. This, in turn, is necessary for their contemplation to be an activity of complete or perfect happiness. Loving wisdom, then, is necessary for one's theoretical wisdom to be superlatively valuable. On this view, it's possible to be wise without loving wisdom, but one would not achieve the good of wisdom, such that one should not be said to grasp theoretical truth well (or as well as possible). In Chapter 7, I argue that Aristotle conceives of theoretical wisdom as an evaluative epistemic state. On this view, ascribing final value to the objects of theoretical wisdom is necessary for knowing (i.e. being wise) in respect of those objects. In this sense, it's not possible to be theoretically wise without also being a lover of wisdom: the theoretically wise person necessarily ascribes value to the proper objects of theoretical wisdom, such that they are good for the theoretically wise person to know.

5.5. Conclusion

In this chapter, I have argued for two proposals according to which Aristotle treats theoretical intellectual virtue as analogous to character virtue. In the first case, I established that Aristotle subscribes to the view that we become virtuous by performing virtuous activities, such that we become wise by performing activities that are characteristic of wisdom, e.g. contemplation (P1). Second, I have worked to motivate the thought that what distinguishes mere contemplation from contemplation performed wisely, is that the wise contemplator (i) contemplates with knowledge (an epistemic condition), (ii) chooses to contemplate for its own sake (a motivational condition), and (iii) contemplates from a firm and unchanging state (a stability condition) (P2). In the next chapter, I continue to argue for the motivation condition, in order to establish P2. This will, in turn, articulate a sense in which the theoretically wise person grasps theoretical truth well: not only do they grasp theoretical truth with knowledge and from a stable state, they also do so with virtuous motivations. I argue that this is necessary in order for their contemplative activity to qualify as an activity of complete or perfect happiness. As such, the theoretically wise person's virtuous motivations (and thus the sense in which they grasp theoretical truth well) explains part of the value of theoretical wisdom: theoretical wisdom is that in virtue of which the activity of contemplation is good for the wise contemplator. In virtue of this, Aristotle has the resources to answer the hard value problem.

6. Theoretical wisdom, contemplation, and happiness

6.1. Introduction

In the previous chapter, I established P1 – according to which one becomes theoretically wise by engaging in the same activities that are characteristic of theoretical wisdom, e.g. contemplation – and provided some motivation for P2 – according to which, in order to contemplate wisely or well, it is necessary that the contemplator contemplates such that they fulfil analogues of all three of Aristotle's agential conditions for virtuous action, i.e. the epistemic, the motivational, and the stability conditions. I take the fact that theoretically wise contemplation requires analogues of the epistemic and stability conditions to be sufficiently established. What requires further motivation is the thought that theoretically wise contemplation requires contemplating with virtuous motivations, i.e. that the contemplator chooses to contemplate and chooses to contemplate for its own sake. In §5.4.4, I argued that Aristotle apparently conceives of theoretical wisdom such that the theoretically wise person is characteristically a lover of wisdom, i.e. they ascribe final value to theoretical wisdom. For example, the theoretically wise person loves contemplation for its own sake (T5.14),[224] chooses and values wisdom because of itself, simply for the sake of knowing (T5.15, T5.16), and pursues wisdom because they consider themselves ignorant and want to know, not on account of wisdom's utility (T5.18).[225] Implicit in these passages is the thought that one is not theoretically wise (or, at least, not properly speaking) unless one attributes final value to wisdom. In this chapter, I continue this train of thought in order to establish the claim that Aristotle distinguishes between *mere* and *theoretically wise* contemplation with reference to the motivation condition, such that contemplation must be performed with virtuous motivations if it is to be performed wisely and, thus, well. I argue that this is an essential component of Aristotle's account of the value of theoretical wisdom: theoretical contemplation is both good and pleasurable

---

[224] I reconsider this passage below, reprinted as T6.4.

[225] See also *EN* 10.8: 1179a26-27.

for the contemplator only if it is performed in accordance with the virtue of theoretical wisdom. As such, the motivational condition helps explain the value of theoretical wisdom over non-virtuous but factive epistemic states concerned with the same theoretical truths: the virtue of theoretical wisdom transforms the activity of contemplation into something good and pleasurable for the contemplator.

I first raise a puzzle about Aristotle's characterisation of the theoretically wise person as a lover of wisdom (§6.2): why suppose that theoretical wisdom requires that its possessor occupy such an evaluative stance? Surely someone could be wise without valuing their wisdom, just as someone could value wisdom without being wise. I respond to this puzzle both in this chapter and the next. I then turn to *Nicomachean Ethics* 10.7-8, where Aristotle argues that theoretically wise contemplation is an activity of complete or perfect happiness (§6.3). I argue that the theoretically wise person's evaluative stance is necessary for their contemplation to be an activity of complete or perfect happiness because, without this, their contemplating will not be good and pleasant for them. In this sense, theoretical wisdom requires that its possessor ascribes final value to the activity of contemplation because, without this, they will not achieve wisdom's full value, i.e. complete or perfect happiness. Finally, I offer a reading of Aristotle's account of the virtuous person as a standard and measure, according to which virtue has a transformative nature: virtue makes good things good *for* the virtuous person (§6.4). I use this to explain the sense in which the motivation condition and the theoretically wise person's evaluative stance explains the value of theoretical wisdom: the virtue of theoretical wisdom transforms the objects and activities of wisdom into something good for the theoretically wise person.

6.2. A puzzle about the wise person's evaluative stance

As noted, Aristotle apparently conceives of theoretical wisdom such that the theoretically wise person is characteristically a lover of wisdom: they ascribe final value to theoretical wisdom (herein I use "lover of wisdom" and "love of wisdom" in this sense). On this view, one isn't theoretically wise (or at least not properly

speaking) unless one is also a lover of wisdom. This should strike us as odd: why should an epistemic state such as wisdom characteristically involve or require that the wise person loves wisdom? We can motivate this question from two perspectives, first comparing wisdom to craft knowledge and second comparing wisdom to the case of character virtue and virtuous action.

Take, first, craft knowledge. Knowing the universal facts and explanations of medicine is sufficient for craft knowledge of medicine. We may even suppose that one must also have experiential knowledge of particulars, such that one is able to reliably produce health in patients. But a doctor may be apathetic about their craft: they need not enjoy practising it.[226] In order to perform their craft skilfully, a doctor must only act with knowledge; they need not choose to produce health for its own sake. This is in part because the doing-well of craft is found in the intrinsic properties of its products (T5.11). The good of a craft is achieved if and only if a good product is achieved, such that the way in which it is achieved has no independent value. From the perspective of craft production, then, it does not matter whether the producer produces with good motivations. Indeed, a doctor may not even choose to bring about health in their patients, instead using their craft knowledge to make others sick. But why shouldn't we think about theoretical wisdom in the same way? Surely it's sufficient for wisdom that one fulfils the epistemic and stability components of it, i.e. having the knowledge and understanding that is constitutive of wisdom and possessing it such that one's knowledge and understanding is stable and steadfast. Call this being *epistemically wise*. On this proposal, one can be epistemically wise without being a lover of wisdom and, in this sense, have the epistemic state of theoretical wisdom without occupying the evaluative stance of the lover of wisdom, i.e. just as one can be a knowledgeable and skilled craftsperson who doesn't love their craft.

Next consider Aristotle's claims about theoretical wisdom from the perspective of character virtue and virtuous action. Aristotle claims that performing

---

[226] This is consistent with the thought that one might become better at one's craft if one takes pleasure in practising and learning it. It's not obvious to me that Aristotle considers the connection between taking pleasure in something and getting better at it to be a necessary one (*EN* 10.5: 1175a29-b1).

virtuous action virtuously requires that the agent chooses the virtuous action and chooses it because of itself (T5.3). Suppose for sake of argument that we agree with Aristotle: virtuous agency does indeed depend on the agent's being motivated by the right reasons, such that being virtuous requires performing virtuous actions with virtuous motivations. Even if we agree with Aristotle on this point in respect of virtuous *action*, it's unclear why the good performance of theoretical intellectual activity should similarly depend on the wise person's motives. Surely being epistemically wise and so contemplating with knowledge and understanding is sufficient for contemplating wisely and well: one need not be a lover of wisdom as well. Again, one can have the epistemic state of theoretical wisdom and contemplate wisely without also being a lover of wisdom.

Aristotle's claim that theoretical wisdom either requires or characteristically involves being a lover of wisdom thus stands in need of defence. Two possible answers present themselves. In the first case, Aristotle might argue that unless the wise person loves wisdom and chooses to contemplate for its own sake, then their contemplative activity will not be an activity of complete or perfect happiness. On this view, someone can be epistemically wise if their knowledge and understanding isn't accompanied by a love of wisdom, but they won't be in a position to achieve the ultimate goodness of contemplation (and thus their epistemic state). This chapter develops this line of response, according to which contemplation is only superlatively good for the contemplator if the contemplator is a lover of wisdom, and so ascribes final value to their contemplative activity. In so doing, I elaborate a sense in which being *virtuously* theoretically wise (where this requires loving wisdom) is of greater value than non-virtuous but factive and stable epistemic states of the same theoretical truths: the virtue of theoretical wisdom transforms contemplation into something good and pleasurable for the contemplator, as an expression of their love of wisdom. On this view, the virtue of wisdom is a composite of two parts: the epistemic (i.e. the knowledge and understanding that is constitutive of wisdom) and the motivational and evaluative (e.g. choosing to contemplate for its own sake, taking pleasure in contemplation, loving wisdom).

A second response answers an objection to the first: even if it's true that one cannot achieve complete or perfect human happiness unless one's wisdom is accompanied by a love of wisdom (such that one is virtuously wise), we should not then conclude that one cannot be theoretically wise (in the epistemic sense) unless one also loves wisdom. Loving wisdom is only necessary for achieving the ultimate goodness of theoretical wisdom, not for being theoretically wise (from an epistemic point of view). In Chapter 7, I respond to this objection by arguing that it's not possible to be fully or properly epistemically wise unless one appreciates the goodness of the objects of wisdom. On this view, theoretical wisdom is an evaluative epistemic state: in order to be epistemically wise (i.e. to have the knowledge and understanding that is constitutive of wisdom) it is necessary that the wise person evaluates the objects of theoretical wisdom as good. Otherwise put: to fail to evaluate the objects of theoretical wisdom as good is an epistemic failure, such that if someone knows a proper object of theoretical wisdom, x, but fails to evaluate x as good, then they should not be said to be theoretically wise in respect of x – there is more for them to know about x, i.e. its goodness. In this sense, then, a love of the proper objects of wisdom is necessary for being theoretically wise because evaluating the objects of wisdom as good is an essential part of knowing them fully (i.e. well).

6.3. Theoretical wisdom and the good of contemplation

In *Nicomachean Ethics* 10.7, Aristotle argues that complete or perfect happiness is contemplative activity of intellect in accordance with theoretical wisdom. This is at least in part due to the fact that wisdom is the proper virtue of intellect. Intellect, in turn, is our best part and is either divine or the most divine part of us. Consequently, wisdom is the greatest virtue (1177a12-18, T6.1 below). Wisdom at least has value, then, because contemplative activity performed in accordance with wisdom is an activity of complete or perfect happiness.[227]

---

[227] I do not intend to take any particular view on the relationship between primary and secondary happiness (*EN* 10.8: 1178a9 *ff.*, for discussion see Charles 1999, Scott 1999).

We may distinguish two questions about this claim. In the first case, why is contemplative activity in accordance with wisdom complete happiness? In the second case, what role does wisdom play in particular? The second question has force when we note that it's possible to contemplate (in some sense) *not* in accordance with wisdom. For example, contemplative activity also belongs to the practically wise person, who contemplates what is good for humans (*EN* 6.7: 1141a25-26.).[228] This contemplative activity fails to be in accordance with theoretical wisdom at least because it is not of the objects of theoretical wisdom. Similarly, I argued in the previous chapter that it's possible to practise contemplation, such that one's practice is for the sake of acquiring contemplative skill (§5.3.4). Practising contemplators don't contemplate in accordance with wisdom, otherwise they would already be contemplating well. Suppose, then, that Aristotle is able to convince us that contemplative activity in accordance with wisdom is indeed complete happiness (the subject of my first question). If this is so, we may still wonder what role wisdom has to play, such that contemplative activity that is *not* in accordance with theoretical wisdom fails to be complete happiness. My second question, then, asks what it is about theoretical wisdom that transforms *mere* contemplative activity into an activity of perfect happiness. This second question will be the subject of this chapter. Answering the first would require a thorough going study of *Nicomachean Ethics* 10.7-8 in the context of the remainder of the

Nor do I take a position on the debate between inclusivists (e.g. Hardie 1967, Ackrill 1974) and dominant-end interpretations (e.g. Kraut 1989) of the human good in the *Nicomachean Ethics*. My focus, instead, is solely on the role that wisdom plays such that contemplative activity is conducive of happiness. I suppose that what I have to say will be independent of whether virtuous contemplation is but one good among many (according to inclusivists) or the dominant human good. Note, also, that Aristotle does not necessarily make an identity claim between theoretical contemplation and complete or perfect happiness (Charles 1999). I use the expression "contemplative activity performed in accordance with wisdom is complete or perfect happiness" in a non-partisan way regarding inclusivist, dominant-end, and focal-meaning readings of Aristotle's claim that theoretically wise contemplation is happiness. It could very well be rephrased as "contemplative activity performed in accordance with wisdom is *an activity of* and/or *the focal case of* complete or perfect happiness".

[228] See also *EN* 1.7: 1098b3, 1.10: 1100b19, 4.2: 1122a35, b17, 6.1: 1139a6-8; 6.4: 1140a10-12, 6.5: 1140b9-11, 7.3: 1146b31-5, 9.9: 1169b33-4, 10.9: 1181b17-20. Roochnik 2009.

Nicomachean Ethics – something that I do not here have the opportunity for. Answering the second, however, will be sufficient for capturing the sense in which theoretical wisdom is of distinctive value.

6.3.1. Why is wise contemplative activity complete happiness?

I first review Aristotle's arguments in answer to my first question.[229] Although those arguments will not be my focus, it's necessary to outline them in order to answer my second question. Aristotle spells out a number of requirements for complete happiness at the beginning of *Nicomachean Ethics* 10.7:

T6.1 And if happiness is activity according to virtue, it is reasonable [that it is] according to the greatest [virtue]; and this will be [the virtue] of the best [thing]. Whether, then, this is intellect or something else, which according to nature seems to rule, lead, and to possess thought concerning fine and divine things, whether in respect of [it] being divine itself, or the most divine [thing] in us – the activity of this, according to the proper virtue [of it], will be complete happiness. And that it is contemplative, we have said. And this would seem to be in agreement with the things [we said] before and the truth. (*EN* 10.7: 1177a12-19)

Εἰ δ' ἐστὶν ἡ εὐδαιμονία κατ' ἀρετὴν ἐνέργεια, εὔλογον κατὰ τὴν κρατίστην· αὕτη δ' ἂν εἴη τοῦ ἀρίστου. εἴτε δὴ νοῦς τοῦτο εἴτε ἄλλο τι, ὃ δὴ κατὰ φύσιν δοκεῖ ἄρχειν καὶ ἡγεῖσθαι καὶ ἔννοιαν ἔχειν περὶ καλῶν καὶ θείων, εἴτε θεῖον ὂν καὶ αὐτὸ εἴτε τῶν ἐν ἡμῖν τὸ θειότατον, ἡ τούτου ἐνέργεια κατὰ τὴν οἰκείαν ἀρετὴν εἴη ἂν ἡ τελεία εὐδαιμονία. ὅτι δ' ἐστὶ θεωρητική, εἴρηται. ὁμολογούμενον δὲ τοῦτ' ἂν δόξειεν εἶναι καὶ τοῖς πρότερον καὶ τῷ ἀληθεῖ.

Aristotle's specification of complete happiness likely looks back to the conclusion of the function argument, that 'the human good turns out to be activity of the soul in accordance with virtue and, if there are several virtues, in accordance with the best

---

[229] My reading of *Nicomachean Ethics* 10.7-8 in the following owes much to Aufderheide (unpublished mss.).

and most complete' (*EN* 1.7: 1098a16-18).[230] Complete happiness, then, will be in accordance with the greatest virtue which is, in turn, the proper virtue of the best part of us: intellect (see T6.3, below). Since intellect has a role to play in both practical and theoretical wisdom (*EN* 6.7, 6.11), both are candidates for the proper virtue of intellect.[231] Aristotle thus sets out to argue that the proper virtue of intellect is theoretical wisdom, on the grounds that theoretically wise contemplative activity most of all fulfils the requirements for complete happiness.

The first string of arguments set out to show that theoretically wise contemplative activity is:

(i)   The greatest activity (1177a19-20);

(ii)   The most continuous activity (1177a21-22);

(iii)   The most pleasant activity (1177a22-27);[232]

(iv)   The most self-sufficient activity (1177a27-b1);[233]

(v)   The only activity loved for its own sake (1177b1-4);[234]

(vi)   Most properly an activity of leisure (1177b4-15).[235]

Aristotle then collects together (ii)-(vi) to claim that contemplative activity of intellect is complete happiness: this activity fulfils the criteria for complete happiness because it is most pleasant, most self-sufficient, chosen only for its own sake, and most leisurely. Virtuous action, Aristotle argues, falls short on all these criteria (1177b16-26).[236]

---

[230] τὸ ἀνθρώπινον ἀγαθὸν ψυχῆς ἐνέργεια γίνεται κατ' ἀρετήν, εἰ δὲ πλείους αἰ ἀρεταί, κατὰ τὴν ἀρίστην καὶ τελειοτάτηνs

[231] The thought that the best part of us by nature leads (ἡγεῖσθαι) certainly hints that practical wisdom is at least a candidate at this stage.

[232] Cf. 1.8: 1099a7-31, 10.5: 1176a22-29.

[233] Cf. 1.7: 1097b6-16, 9.6: 1176a33-b6.

[234] Cf. 1.7: 1097a20-b6, b16-20.

[235] Cf. 10.6: 1176b16-19, b27-1177a1.

[236] Aristotle makes no mention of continuousness in this conclusion. Perhaps this lacuna can be accounted for with two thoughts: that contemplation is the least wearisome human activity (1177b22) and the least wearisome activity can be engaged in most

Aristotle next returns to (i): the life of contemplative activity is superior (κρείσσων) to a life that is merely human because intellect is divine (1177b26-31). Aristotle even proposes that intellect is most properly human, such that a life lived without it would fail to be a human life (1178a2-4). Thus 10.7 concludes that:

T6.2 For, that which is proper to each by nature is the greatest and most pleasant to each; and thus, the life in accordance with intellect is [proper] to a human being, if indeed a human being is most of all this. Therefore, this life is also happiest. (*EN* 10.7: 1178a5-8)

τὸ γὰρ οἰκεῖον ἑκάστῳ τῇ φύσει κράτιστον καὶ ἥδιστόν ἐστιν ἑκάστῳ· καὶ τῷ ἀνθρώπῳ δὴ ὁ κατὰ τὸν νοῦν βίος, εἴπερ τοῦτο μάλιστα ἄνθρωπος. οὗτος ἄρα καὶ εὐδαιμονέστατος

Contemplative activity in accordance with wisdom, then, is complete happiness for at least two reasons. In the first case, it fulfils (ii)-(vi) and thus succeeds in fulfilling (to the greatest extent) the criteria for happiness being the most complete activity, set out earlier in the *Nicomachean Ethics* (see references accompanying ii-vi). In the second case, it is also the best activity because it is the proper activity of the best, i.e. most divine, part of us. Theoretically wise contemplative activity is the human good, then, because it is activity of the soul in accordance with both the best and most complete virtue.[237]

Aristotle certainly gives further arguments for the identification of complete happiness with theoretically wise contemplative activity in *Nicomachean Ethics* 10.8. However, I here focus on a number of Aristotle's initial considerations (i, iii, and vi) in order to establish a sense in which theoretical wisdom transforms *mere* contemplative activity into the activity of perfect happiness. I shall not offer any consideration of whether Aristotle's criteria for complete happiness are good

---

continuously. Aristotle also introduces the fact that contemplation is more serious (σπουδή) which likely supports the thought that it is the proper activity of leisure (cf. 10.6: 1176b16-1177a11).

[237] I do not mean to suggest that these are independent criteria, such that it could be the case that the most complete activity is not the best activity. Rather, my distinction draws on the different argumentative resources that Aristotle employs in each case.

criteria. But even if we don't agree with Aristotle that theoretical contemplative activity is the human good, I submit that there is philosophical worth to be found in the manner that theoretical wisdom has value, because it transforms contemplative activity into something good and pleasant for the contemplator (and, thus, the sense in which Aristotle employs the concept of virtue to explain the value of theoretical wisdom).

6.3.2. *How does theoretical wisdom transform contemplative activity?*

What role does theoretical wisdom play in transforming mere contemplative activity into contemplative activity that is complete or perfect happiness? I shall focus in particular on three of Aristotle's considerations in order to show that being epistemically wise (as described in §6.2) is insufficient for complete happiness. In addition to being epistemically wise, the theoretically wise contemplator must also be a lover of wisdom such that they attribute final value to the activity of contemplation.

6.3.2.1. *Only wise contemplation is of the best objects*

In the first case, it's worth noting one obvious salient feature of theoretical wisdom's role – one that I will set aside until the next chapter. Aristotle's first reason in favour of contemplation's goodness is as follows (i, above):

T6.3   For this activity [i.e. contemplative activity of intellect in accordance with its proper virtue] is greatest (for, also, intellect [is the greatest] of things in us, and [the greatest] of knowable objects, intellect is concerned with these); (*EN* 10.7: 1177a19-21)

κρατίστη τε γὰρ αὕτη ἐστὶν ἡ ἐνέργεια (καὶ γὰρ ὁ νοῦς τῶν ἐν ἡμῖν, καὶ τῶν γνωστῶν, περὶ ἃ ὁ νοῦς)·

Contemplative activity of intellect in accordance with its proper virtue is complete happiness because it is the greatest activity. And it is the greatest activity because intellect is the greatest part of us and is concerned with the greatest of knowable objects. Whilst Aristotle is not here explicit about the nature of these objects, he has already made clear that, although humans are the best of all the animals, there are nonetheless better and more divine objects of knowledge, e.g. the beings from which the universe is composed (*EN* 6.7: 1141a34-b2). Since only theoretical wisdom is concerned with objects that are by nature most estimable (1141b2-3), T6.3 makes clear that Aristotle must have theoretical wisdom in mind. And this makes clear an important feature of theoretical wisdom: since theoretical wisdom (and only theoretical wisdom) knows the best objects, only contemplative activity in accordance with theoretical wisdom can be the best activity. Aristotle's thought seems to be, then, that theoretically wise contemplative activity is better than mere contemplative activity, in virtue of its being concerned with better objects. And, since theoretically wise activity is of the best objects, it is the best activity.

Aristotle here, it seems to me, points directly to theoretical contemplation's ultimate source of value: it is the activity of the best part of us which is, in turn, concerned with the greatest of knowable objects. I do not evaluate the claim that intellect is the best part of us. I do, however, return at length in the next chapter to the thought that intellect is concerned with the best knowable objects. I now turn to the sense in which contemplation is loved because of itself and is the most pleasant activity.

6.3.2.2. *Only wise contemplation is loved because of itself*

Aristotle's fifth reason for identifying theoretically wise contemplation with complete happiness is that it alone is loved because of itself (v, above). He tells us that:

T6.4   Moreover, it [i.e. contemplative activity in accordance with theoretical wisdom] alone would seem to be loved because of itself; for, nothing comes

to be from it beside having contemplated, but from practical [activities] we make for ourselves [something] larger or smaller beside the action. (*EN* 10.7: 1177b1-4)

δόξαι τ' ἂν αὐτὴ μόνη δι' αὑτὴν ἀγαπᾶσθαι· οὐδὲν γὰρ ἀπ' αὐτῆς γίνεται παρὰ τὸ θεωρῆσαι, ἀπὸδὲ τῶν πρακτικῶν ἢ πλεῖον ἢ ἔλαττον περιποιούμεθα παρὰ τὴν πρᾶξιν.

Aristotle's argument relies on the thought that contemplation is an activity that produces nothing beyond the activity of contemplation. Virtuous action, on the other hand, not only produces some consequences in addition to the action itself but, importantly, produces consequences that are indeed good and desirable (see §5.4.3). Although Aristotle is not explicit, T6.4 is most plausibly read as a consideration in favour of his eventual claim that contemplation is most properly chosen for its own sake, and that virtuous action falls short in this respect (*EN* 10.7: 1177b16-26). Consequently, virtuous actions are such that their goodness is not exhausted by the action itself: the good consequences that they bring about provide additional reason to love and choose virtuous action. This is not the case for contemplation: it is the only activity that is properly loved because of itself.

Why so? In T6.4, Aristotle justifies his claim in light of the fact that nothing comes from contemplating other than having contemplated: it has no external results. This recalls Aristotle distinction between change (κίνησις) and activity (ἐνεργεία). Roughly speaking, a change is a process that is incomplete and moves towards an end for its completion. For example, the process of building a house is an incomplete process and thus a change because it is incomplete until the house is complete: only when the house is complete has the process of building a house reached its end.[238] Other examples of changes for Aristotle are making something thin, learning, and walking (*Met* 9.6: 1048b29-3).[239] Aristotle's prime examples of activities, on the other hand, are seeing (ὁράω), understanding (φρονέω), and thinking (νοέω) (*Met* 9.7: 1048b18-35). Each is an instance of activity because in each

---

[238] See, for example, *Met* 9.6: 1048b18-36, 9.8: 1050a23-36, *Phys* 3.1: 201b31. For discussion, see Makin 2006: 144 *ff*.

[239] For vindication of Aristotle's troubling case of walking, see Makin 2006: 149.

case the completion is *in* the activity itself, such that at the same time one is seeing and has seen, is understanding and has understood, and is thinking and has thought. Indeed, Aristotle later claims that in the case of seeing 'the use is final' (ἔσχατον ἡ χρῆσις) because 'nothing else beyond this comes to be from sight' (οὐθὲν γίγνεται παρὰ ταύτην ἕτερον ἀπὸ τῆς ὄψεως). Changes such as building and learning, however, yield something beyond the process of building and walking (*Met* 9.8: 1050a23-27). We might suppose, then, that contemplation is an activity such that nothing other than having contemplated comes from the activity of contemplation. As a consequence, contemplation is loved because of itself because there is (in an ontological sense) nothing beyond the activity of contemplation that one may love contemplation for the sake of.

But we should be wary of this interpretation. To see this, consider Aristotle's remarks about sight at the beginning of the *Metaphysics*:

T6.5   All humans by nature desire to know. A sign of this is the delight of our senses; for, even apart from their usefulness they are loved because of themselves, and, most of all others, the sense of sight. For, not only in order to act successfully, but also not being likely to act, we choose sight over all the others, so to say. The reason is that this, most of all the senses, makes us know and makes clear many differences. (*Met* 1.1: 980a21-27)

Πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. σημεῖον δ' ἡ τῶν αἰσθήσεων ἀγάπησις· καὶ γὰρ χωρὶς τῆς χρείας ἀγαπῶνται δι' αὐτάς, καὶ μάλιστα τῶν ἄλλων ἡ διὰ τῶν ὀμμάτων. οὐ γὰρ μόνον ἵνα πράττωμεν ἀλλὰ καὶ μηθὲν μέλλοντες πράττειν τὸ ὁρᾶν αἱρούμεθα ἀντὶ πάντων ὡς εἰπεῖν τῶν ἄλλων. αἴτιον δ' ὅτι μάλιστα ποιεῖ γνωρίζειν ἡμᾶς αὕτη τῶν αἰσθήσεων καὶ πολλὰς δηλοῖ διαφοράς.

Note, first, that Aristotle here speaks in the same terms as T6.4: our senses, like contemplative activity, are loved (ἀγαπῶνται) for their own sake, such that we take delight (ἀγάπησις) in them. And we choose sight over the other senses even if we do not intend to act. But the example of sight also makes clear that sight *could* be chosen for the sake of action. This is even true if seeing is an activity: even if nothing else comes to be from seeing beyond having seen, such that one at the same

time is seeing and has seen, it doesn't follow that one can't choose to see for some other reason, e.g. to make use of one's perceptual knowledge in order to act successfully. Otherwise put: just because the activity of seeing contains its completion in itself, it doesn't follow that what one sees (and has seen) cannot be put to use for some other end. But if that's the case, one could very well *choose* to see for the sake of some other end.[240]

What this example at least shows, then, is that even if sight is an activity such that nothing comes from the activity of seeing beyond having seen, it doesn't follow that the activity of seeing doesn't yield results that can be put to use. For example, it might be true that I am at the same time seeing and have seen that it's raining outside. Nonetheless, I can still make practical use of the perceptual knowledge that results from this seeing and having seen that it's raining outside, e.g. by deciding to take an umbrella. As a consequence, I can *choose* to see not just for the seeing itself (or the knowledge and differences brought to light in that activity of seeing) but for the further end of acting successfully. And this may also apply in the case of contemplation. Although contemplation has fewer obvious useful applications, it nonetheless might be put to use. Just as one might look at something again and, in so doing, reinspect what one has already seen, one may also contemplate again and, in so doing, bring to mind what one has already come to know. Having contemplated and so brought something to mind, one may put what one has contemplated to use, e.g. by teaching it. And note that it may not be sufficient to simply recall from one's memory what one knows for this purpose. There are some things that, in order to teach well, one must not only recall them but also reflect upon and pay attention to what one knows. In such cases, it will be necessary to bring these things to mind by means of contemplating them in order to teach. Choosing contemplation in order to teach, then, is still an activity: at the same time that one is contemplating one has contemplated. But in spite of it being an activity, it's possible that one may have *no* love for it and only ever choose to

---

[240] Indeed, it's even possible that someone could fail to take delight in and love the senses for their own sake altogether.

contemplate in order to put one's knowledge to use. In such cases, one engages in the activity of contemplation, but neither loves nor chooses it for its own sake.

What might we conclude from this? On the one hand, Aristotle appears to suppose that theoretical contemplation is an activity that is, properly speaking, both worthy of love and choiceworthy for its own sake. On the other, it's possible that one can engage in this activity in a manner that fails to appreciate or pay heed to its final value. In such cases, although the activity of contemplation is choiceworthy for its own sake, it need not be undertaken as such. We may draw two alternative conclusions from this:

(1) The activity of the contemplator who chooses to contemplate for some further end is nonetheless an activity of complete happiness (all other things being equal) because contemplation is the only activity that is superlatively choiceworthy. Accordingly, the contemplator's evaluation of and reasons for engaging in the activity do not detract from the fact that they are nonetheless engaging in the most choiceworthy activity and thus (all other things being equal) the activity of complete or perfect happiness. Contemplating is still maximally good for them as an activity of happiness.

Alternatively:

(2) The activity of the contemplator who chooses to contemplate for some further end fails to be an activity of complete happiness because they neither love nor choose contemplation for its own sake. Accordingly, the contemplator's evaluation of and reasons for engaging in the activity detract from the fact that they are engaging in the most choiceworthy activity. Their contemplation is not good for them as an activity of complete happiness.

Perhaps in favour of (1) is the thought that T6.4 appears to invoke the fact that contemplation is loved for its own sake as evidence for the later claim that it is in fact the most choiceworthy activity. Thus Aristotle infers that contemplation is most

choiceworthy because only it is loved for its own sake. However, in favour of (2) is the thought that Aristotle discounts virtuous actions in politics and war as activities of complete happiness because 'they seek some end and are not chosen because of themselves' (τέλους τινὸς ἐφίενται καὶ οὐ δι' αὐτὰς αἱρεταί εἰσιν, *EN* 10.7: 1177b18). This suggests that, if one does not choose contemplation because of itself, one's contemplative activity should be relegated to the second-rate status of virtuous action (at least in this respect). An additional reason in favour of (2) is that it tallies well with the thought that virtuous agency is an expression of an agent's preferential choice, in a manner that expresses their values in identifying and pursuing the fine. On this view, an agent must be the author of their own actions in order for their actions to be performed virtuously (*EN* 2.4: 1105a28-33) and, in turn, for their actions to be good for them *qua* activities of happiness (*EN* 1.7: 1098a16-18). As Gavin Lawrence puts it:

> *Praxis* is then action that agents stand four-square behind, seeing it as truly theirs – as expressing their selves, their values, and character – as being the fine way to go on, as making a life worth the living. For Aristotle, it is *this* that is specifically *human* activity – the *humaning* that is the realization of their essence – the *form of life* and *life-activity* that constitutes the function of the human in the adult, or mature, perfection of its nature (*tetelesmenon*) (1.7, 1098a3-5). We are essentially *Act-ors*, or *Prakt-ors* – chosen action is the specific, or distinctive, human mode of being alive ('each thing is defined by its end', 1115b22): and our ultimate end is success at *Praxis* (i.e. *eupraxia*). (Lawrence 2011: 235)

An agent's actions are constitutive of happiness only if their actions are an expression of their virtuous character and preferential choice. In this sense, the virtuous agent is an author of their own actions. But we have no reason to suppose that preferential choice is not also necessary for the theoretically wise person's contemplative activity to be an activity of happiness. If Aristotle considered such an expression of choice to be necessary for one's virtuous *actions* to be activities of happiness, it stands to reason that the same should hold true in the case of contemplation (i.e. in the case of theoretical intellectual activities that are constitutive of happiness). If the theoretically wise person doesn't choose the

activity of contemplation for its own sake, then their activity will not be an expression of their values and virtue. So, just as one does not act virtuously unless one chooses that action for its own sake, one's contemplation should not count as being performed virtuously and well (i.e. as an activity of happiness) unless one chooses to contemplate for its own sake.

I take these considerations in favour of conclusion (2): contemplation is not an activity of complete or perfect happiness unless the contemplator chooses contemplation for its own sake, as an expression of their virtue and preferential choice. This, in turn, establishes P2: in order to contemplate wisely and well (i.e. virtuously) it is necessary that the contemplator fulfils an analogue of the motivation condition for virtuous agency: they must choose to contemplate for its own sake. What's more, theoretical wisdom is valuable because, in order to contemplate wisely one must choose to contemplate for its own sake, and one must choose to contemplate for its own sake in order for one's contemplation to be an activity of complete happiness. In this sense, the virtue of theoretical wisdom transforms the contemplator's contemplative activity into an activity of complete or perfect happiness. In the following, I continue to pursue the idea that a contemplator must take up a particular evaluative stance in order for their contemplation to be an activity of complete happiness.

6.3.2.3. *Wise contemplation is most pleasant*

Aristotle's third reason for identifying theoretically wise contemplation with complete happiness is that it is the most pleasant activity (iii, above). He tells us that:

T6.6 And we think that pleasure must be mixed together with happiness, and the most pleasant activity in accordance with virtue is agreed [to be] the [activity] in accordance with theoretical wisdom; it seems, at least, that the love of wisdom has pleasures that are wondrous in respect of their purity and stability, and it is reasonable that the way of passing time is more pleasant for those who know than for those who are inquiring. (*EN* 10.7: 1177a22-27)

οἰόμεθά τε δεῖν ἡδονὴν παραμεμῖχθαι τῇ εὐδαιμονίᾳ, ἡδίστη δὲ τῶν κατ' ἀρετὴν ἐνεργειῶν ἡ κατὰ τὴν σοφίαν ὁμολογουμένως ἐστίν· δοκεῖ γοῦν ἡ φιλοσοφία θαυμαστὰς ἡδονὰς ἔχειν καθαρειότητι καὶ τῷ βεβαίῳ, εὔλογον δὲ τοῖς εἰδόσι τῶν ζητούντων ἡδίω τὴν διαγωγὴν εἶναι.

Aristotle claims that the most pleasant activity is activity in accordance with theoretical wisdom. This is essential for Aristotle's thought that the human good is most complete: pleasure completes its proper activity, such that performance of an activity without its proper pleasure necessarily renders that activity incomplete (*EN* 10.4: 1174b14-23, b31-1175a3, a10-17, 10.5: 1175a26-36). Aristotle could, but does not, argue that the activity of theoretical wisdom is most pleasant by relying explicitly on arguments from *Nicomachean Ethics* 10.4-5, but the reader can certainly spell out the details. There, Aristotle claims that perceptual capacities are completely active when they are in the best condition and concerned with the finest of perceptual objects (*EN* 10.4: 1174b14-16). He claims, further, that 'according to each [perceptual capacity], then, the best activity is that of the subject in the best condition in relation to the most excellent of its objects' (1174b18-19).[241] Whether perceptual activity is most complete and so most pleasant, thus depends both upon the nature of the objects at which it is directed *and* the condition of the perceiving subject or perceptual powers.

  We might suppose, then, that theoretically wise contemplation is the most pleasant activity because it is most complete, and it is most complete because it is the activity concerned with the best objects by a subject who is in the best state relative to those objects, i.e. the person who is theoretically wise. Indeed, Aristotle later extends his line of argument beyond the perceptual:

T6.7 And pleasure completes the activity, not as the underlying state, but as a sort of superadded end, e.g. like the bloom of those in their prime. And so, as long as both the intelligible object or the perceptible one, and that which judges and contemplates them, are as they should be, there will be pleasure

---

[241] καθ' ἑκάστην δὴ βελτίστη ἐστὶν ἡ ἐνέργεια τοῦ ἄριστα διακειμένου πρὸς τὸ κράτιστον τῶν ὑπ' αὐτήν

in the activity; for, when what is affected and the thing producing the effect are similar and keep in the same relation to each other, the same thing naturally arises. (*EN* 10.4: 1174b31-1175a3)

τελειοῖ δὲ τὴν ἐνέργειαν ἡ ἡδονὴ οὐχ ὡς ἡ ἕξις ἐνυπάρχουσα, ἀλλ᾽ ὡς ἐπιγινόμενόν τι τέλος, οἷον τοῖς ἀκμαίοις ἡ ὥρα. ἕως ἂν οὖν τό τε νοητὸν ἢ αἰσθητὸν ᾖ οἷον δεῖ καὶ τὸ κρῖνον ἢ θεωροῦν, ἔσται ἐν τῇ ἐνεργείᾳ ἡ ἡδονή· ὁμοίων γὰρ ὄντων καὶ πρὸς ἄλληλα τὸν αὐτὸν τρόπον ἐχόντων τοῦ τε παθητικοῦ καὶ τοῦ ποιητικοῦ ταὐτὸ πέφυκε γίνεσθαι.

Although Aristotle is here concerned with the claim that such perceptual and intellectual activity will necessarily involve pleasure – indeed, they will always involve pleasure (1174b29-31) – we have no reason to suppose that intellectual activities that contemplate intelligible objects aren't also most pleasant when they are of the best objects and contemplated by someone (or someone's intellectual capacity) that is in the best condition in relation to those objects, and similarly in T6.6. The state of the wise person's intellect, then, in addition to the objects they direct it towards, is essential for their contemplative activity to be most pleasant.

Nonetheless, Aristotle does not make this line of argument in T6.6. Instead, he first notes that the love of wisdom seems at least (δοκεῖ γοῦν) to involve pleasures that are wondrous in respect of their purity and stability, and then supposes that the person who knows will experience greater pleasures than the person who is inquiring.[242] Aristotle's characterisation of the lover of wisdom, then, most plausibly has someone in mind who loves wisdom but is not yet wise. And *they* seem to experience wondrously pure and stable pleasures, such that we may reasonably infer that the person who is in fact wise will experience the most pleasure when they contemplate.[243] But we should not infer from this that the theoretically wise person is no longer a lover of wisdom (just as if one were to suppose that being a lover of wisdom requires lacking what one loves). Indeed,

---

[242] Aristotle has not yet mentioned the stability of pleasures (though see *EN* 1.10: 1100b12-13). Purity is briefly mentioned at *EN* 10.5: 1175b36-1176a1. See also 10.6: 1176b1176b19-21.

[243] Aufderheide 2016: 304-305, Broadie & Rowe 2002: 442.

Aristotle's argument in T6.4 depends upon the thought that the theoretically wise person remains a lover of wisdom. He argues that:

(1) The love of wisdom seems to have pleasures that are wondrous in respect of purity and stability;

(2) The way of passing time is more pleasant for those who know than for those who are inquiring;

(3) Therefore: the contemplative activity of those who know (i.e. the theoretically wise) is most pleasant.

Aristotle's conclusion presupposes that the theoretically wise person is also a lover of wisdom, such that the wondrous pleasures of those who love wisdom but are not yet wise are amplified in the case of the theoretically wise person. If the theoretically wise person isn't also a lover of wisdom, then Aristotle needs to provide further argument as to why the wondrous pleasures of the love of wisdom are also experienced (in an amplified way) by the theoretically wise person.[244]

This reading is supported by two further considerations. First, Aristotle apparently conceives of theoretical wisdom as requiring or characteristically involving a love of wisdom, as argued in §5.4.4. Second, in *Nicomachean Ethics* 1.8 Aristotle makes his case against the Delian inscription – according to which the finest, noblest, and most pleasant things are distinct – by arguing that a life of virtuous activity is pleasant according to itself. To this end, Aristotle employs a general principle: lovers of x find x things pleasant, e.g. lovers of horses find horses pleasant, lovers of spectacles (φιλοθέωρος) find spectacles pleasant (θέαμα), and lovers of justice find justice pleasant (1099a10-11). Similarly, then, lovers of wisdom find wisdom pleasant. Whilst this principle doesn't entail that one doesn't or couldn't find wisdom pleasant unless one is a lover of wisdom, it is certainly suggestive that Aristotle considers there to be an important connection between loving wisdom and taking pleasure in wisdom.

---

[244] See also Aufderheide 2016: 304 *n*. 42.

Given this, Aristotle appears to argue in *Nicomachean Ethics* 10.7 (T6.6) that theoretical contemplation is the most pleasant activity in part because the theoretically wise contemplator is a lover of wisdom. On this view, part of what is required for contemplation to be maximally pleasant is that the contemplator and their contemplative power is in the best condition with respect to the objects of contemplation. And this, in turn, not only requires that the contemplator has the appropriate contemplative skill, but that they are also a lover of wisdom. Aristotle maintains that pleasure completes an activity, such that a happy life must be mixed together with pleasure. Consequently, if someone were to contemplate and not take pleasure in their contemplation, their activity would fail to be an activity of complete happiness.

Although this does not directly support P2 – according to which the theoretically wise contemplator must choose contemplation for its own sake – it stands in favour of the broader view that the theoretically wise contemplator must occupy a particular evaluative stance in relation to their contemplative activity: they must love wisdom such that their contemplation is maximally pleasant for them. Without this, their contemplative activity will not be maximally good for them, in so far as it is not an activity of complete happiness. In this sense, then, the theoretically wise contemplator must contemplate with the correct evaluative attitude in order to contemplate well: they must be a lover of wisdom, such that they take pleasure in their contemplation.

6.4. The transformative nature of theoretical wisdom

In this section, I further support the claim that the theoretically wise contemplator must ascribe final value to the objects and activities of theoretical wisdom. I do so through a consideration of the transformative role of virtue, according to which the good without qualification is good for the virtuous person because of their virtue. I take this as additional support for the view that the virtue of theoretical wisdom transforms the objects and activities of wisdom into something good for the theoretically wise contemplator: their wisdom is such that the activities and objects

of wisdom are good, pleasant, and fine to them. To this end, I first provide an interpretation of the sense in which the excellent person is a standard and measure (§6.4.1) before detailing the implications of this view for the value of theoretical wisdom (§6.4.2).

6.4.1.   The excellent person as a standard and measure

Nicomachean Ethics 3.4 is concerned with wish and its objects. In it, Aristotle asks whether the object of wish (τὸ βουλητὸν)[245] is the good (τἀγαθός) or the apparent good (ὁ φαινόμενος ἀγαθός, 1113a15-16). The two views play off an ambiguity between τὸ βουλητὸν as, on the one hand, that which should be wished for and, on the other, that which is wished for.

The idea that the object of wish is the good recalls views ascribed to Socrates in the *Gorgias* (466a-468e), according to which whether or not something is an object of wish depends solely on whether it is in fact the good or not. Consequently, if someone were to deliberate badly and wish for something that is not the good, then technically they would have failed to wish for an object of wish, and so failed to wish altogether (*EN* 3.4: 1113a17-19). The second view recalls Protagorean ideas discussed in *Metaphysics* 4.5 and mentioned again in 11.6 (1062b12-19): the object of wish is whatsoever appears good to someone.[246] In this case, whether something is an object of wish depends solely on whether or not someone wishes for it, and not on the nature of that object as good (or otherwise). Given the fact that two different people might wish for contrary objects, the object of wish might itself be contrary. This leads to a form of relativism: the proper object of wish is whatever appears good to a particular person (and indeed all people) at some time, and there is nothing that is good by nature (φύσει, 1113a20-22).

Aristotle finds neither view palatable; he attempts to combine the normative aspects of the Socratic view – that the good is the object of wish that should be

---

[245] Retaining the bracketed τό in the OCT at 1113a17

[246] I agree with Jessica Moss that the flavour of this passage is intensional: the apparent good involves apprehending something as good. Moss 2012: 5-8.

wished for – with the agent-relative aspects of the Protagorean view – that the object of wish appears good to the person who wishes for it. To this end Aristotle distinguishes between the object of wish without qualification and in truth (ἁπλῶς καὶ κατ' ἀλήθειαν) and the object of wish to each person (ἑκάστῳ) (1113a23-24). He further assigns *the good* as the object of wish without qualification and *the apparent good* as the object of wish to each person.

The trick to Aristotle's solution is the thought that the good in truth also appears good to the excellent person. But this is not true of a base person – what appears good to them could be any chance thing (τὸ τυχόν, 1113a25-26):

T6.9 For, the excellent man judges each thing correctly and, in each case, the truth is apparent to him. For each state has its own special fine and pleasant things, and the excellent man is perhaps distinguished most in virtue of his seeing the truth in each case, just like a standard and measure of them. But in the case of the many, deception seems to come about because of pleasure; for it appears to be good though it is not. And so, they choose what is pleasant as good and avoid what is painful as bad. (*EN* 3.4: 1113a29-b2)[247]

ὁ σπουδαῖος γὰρ ἕκαστα κρίνει ὀρθῶς, καὶ ἐν ἑκάστοις τἀληθὲς αὐτῷ φαίνεται. καθ' ἑκάστην γὰρ ἕξιν ἴδιά ἐστι καλὰ καὶ ἡδέα, καὶ διαφέρει πλεῖστον ἴσως ὁ σπουδαῖος τῷ τἀληθὲς ἐν ἑκάστοις ὁρᾶν, ὥσπερ κανὼν καὶ μέτρον αὐτῶν ὤν. ἐν τοῖς πολλοῖς δὲ ἡ ἀπάτη διὰ τὴν ἡδονὴν ἔοικε γίνεσθαι· οὐ γὰρ οὖσα ἀγαθὸν φαίνεται. αἱροῦνται οὖν τὸ ἡδὺ ὡς ἀγαθόν, τὴν δὲ λύπην ὡς κακὸν φεύγουσιν.

The excellent person judges correctly, such that what appears good to them is truly good. Consequently, the excellent person's object of wish is the object of wish without qualification, making them the standard and measure of what is good, noble, and fine. What, however, is the relationship between the excellent person and the object of wish without qualification? And in what sense is the excellent person a standard and measure of what is in fact good?

---

[247] Cf. *EN* 9.4: 1166a12-13; 10.5: 1176a15-24.

Commentators often distinguish between two ways of conceiving of the excellent person as a standard and measure.[248] On the one hand, it might be the case that the excellent person is a measure merely in an epistemic sense: the excellent person measures reality well because the good also appears good to them. They thus act as a standard by which we can tell what is good. But it's not the case that the good is good because it appears good to the excellent person. Its goodness is in no way constituted or caused by the fact that the excellent person judges it to be good, in the way that the temperature is not constituted by the fact that a thermometer judges it accurately. Rather, the good is good in virtue of its own nature and the excellent person apprehends its goodness well.

On the other hand, Aristotle's characterization of the excellent person as a standard and measure could be a modified version of the Protagorean claim that humans are the measure of all things.[249] According to the Protagorean thesis, whatever appears so to each person is the case for that person. Thus whatever appears good to each person is good for that person and, crucially, it is good for each person just in so far as it appears good to them.[250] We might then wonder whether Aristotle offers a modified Protagorean view: the good appears good to the excellent person, and it is good *because* it appears good to the excellent person. Thus the excellent person is not merely an epistemic measure and standard, but their judgement is itself constitutive of the measure and standard. For example, we might say that a metre is a constitutive measure and standard in so far as it constitutes a standard unit of length. It is also a standard by which we can measure lengths.

In favour of the modified Protagorean reading is that Aristotle seems to explain the fact that the good is the unqualified object of wish by means of the fact that the good person judges it correctly (note the use of γάρ in T6.9, 1113a29).[251] What's more, Aristotle apparently fails to distinguish between something appearing good to the excellent person and it being good for them:

---

[248] Gottlieb 1991, Aufderheide 2017: 211-217.

[249] Plato *Theaetetus*: 152a2-8. Cf. 161c3.

[250] Gottlieb 1991: 28-29.

[251] Aufderheide 2017: 213-215.

T6.10 And so, to/for the excellent person it [the object of wish] is what is truly [the object of wish], and to/for the base person, it is the chance thing [it happens to be], just as it is also in the case of bodies: the sort of things that are in truth [healthy] are healthy to/for people in good [bodily] condition, and other things [are healthy] to/for people who are unwell; and also likewise bitter things, sweet things, hot things, heavy things, and each of the others […] (*EN* 3.4: 1113a25-29)

τῷ μὲν οὖν σπουδαίῳ τὸ κατ' ἀλήθειαν εἶναι, τῷ δὲ φαύλῳ τὸ τυχόν, ὥσπερ καὶ ἐπὶ τῶν σωμάτων τοῖς μὲν εὖ διακειμένοις ὑγιεινά ἐστι τὰ κατ' ἀλήθειαν τοιαῦτα ὄντα, τοῖς δ' ἐπινόσοις ἕτερα, ὁμοίως δὲ καὶ πικρὰ καὶ γλυκέα καὶ θερμὰ καὶ βαρέα καὶ τῶν ἄλλων ἕκαστα·

Notably, the Protagorean maintains that something is good *for* me just in so far as it appears good *to* me; if Aristotle were presenting a modified Protagorean doctrine, then he would have no need to distinguish between what appears good to someone and what is good for them.[252] Given this, we might be inclined to read Aristotle's measure doctrine as a modified Protagoreanism: the good is good (and is good for the excellent person) just in so far as and because it appears good to the excellent person.

Nonetheless, Paula Gottlieb (1991) and Joachim Aufderheide (2017) both argue for a non-Protagorean interpretation. I shall detail one of their reasons each. First, as Aufderheide (2017: 214) argues, Aristotle's example of health in T6.10 rather suggests a non-Protagorean reading. Aristotle elsewhere implies that health has its own nature independent of the healthy person's response to health. For instance, he characterizes health in terms of a mixture and proportion of hot and cold elements in the body (*Phys* 7.3: 246b4-20) or an organ's ability to perform its proper function without pain or exhaustion (*HA* 10.1: 633b16-23). These characterizations suggest that health has an underlying nature that is independent of an agent's response to it. Similarly, then, we might think that healthy things are healthy because of having a certain, underlying nature, and not merely because they either appear healthy to or are healthy for the healthy person.

---

[252] Gottlieb 1991: 28-33.

Second, as Gottlieb (1991: 36-39) shows, Aristotle's distinction between what is good without qualification and what is good to/for someone often suggests that the good is good because of its own nature. For instance, in the *Eudemian Ethics* Aristotle tells us that, 'things good without qualification are by nature good to/for a human being' (*EE* 7.2: 1236b39-1237a5).[253] Later on, he similarly declares that, 'a good man is one to/for whom things that are by nature good are good [to/for him]' (*EE* 8.3: 1248b26-27).[254] Crucially, neither passage suggests that the good without qualification is good because it is good for the good person. Rather, the good without qualification is good by nature, and this is also good to/for the good person.

Although these considerations may not be decisive, they certainly suggest a non-Protagorean reading of Aristotle's description of the excellent person. The excellent person is a measure and standard of the good because they accurately apprehend the good, but it is not the case that the good is good because it appears good to them – it is good because of its underlying nature. Nonetheless, it's important to note that the good without qualification is only good for the excellent person in virtue of their excellence. This can be seen if we consider the relationship between a person's state or condition and what is good or bad for them. For instance, also in *Eudemian Ethics* 7.2, Aristotle again reminds us that the good without qualification and the good for us may diverge. In the case of health, medicine and operations are good for someone who is sick but are not good without qualification. Different things are beneficial and good for a healthy body, i.e. a body that does not need operations and medicine to remain healthy and flourish (1235b32-35). A sick body, on the other hand, needs these in order to become healthy. (And if a healthy body needs operations and medicines, it will at least need different operations and medicines to the sick body.) On the assumption that the medicines and operations that Aristotle has in mind are not merely palliative (i.e. they are administered not to maintain a sick body but to get it into shape) then what is good for a sick body is good in so far as it will help a sick body get healthy. In this sense, what is good for the sick person might in fact be good for

---

[253] φύσει γὰρ αὐτῷ ἀγαθὰ τὰ ἁπλῶς ἀγαθά

[254] ἀγαθὸς μὲν οὖν ἐστιν ᾧ τὰ φύσει ἀγαθά ἐστιν ἀγαθά

them in so far as it will make them healthy (it yields something that is in fact good) and what is good for the healthy person may not also be good for the sick person *qua* sick person.[255]

But what is it about being healthy or sick that makes different things healthy for you? In T6.9, the excellent person judges the truth about what is good because (γὰϱ) 'each state has its own special noble things and pleasant things' (*EN* 3.4: 1113a31).[256] It is the excellent person's state, then, that is explanatory of their judging well. Similarly in *Eudemian Ethics* 7.2: only healthy bodies and mature souls in fact enjoy what is pleasant without qualification, and what is pleasant to each person is in accordance with that person's state (κατὰ τὰς ἕξεις, 1236a5-6). There is a correlation, then, between the state of each person and what is good, noble, pleasant, and healthy for them.[257] But in the *Politics*, Aristotle makes clear that he has in mind more than a mere correlation:

T6.11   The excellent man may deal with poverty, sickness, and other sorts of bad fortune in a fine way. But prosperity is in the opposites of these (for this also has been determined according to the ethical accounts, that the excellent man is the sort for whom, *because* of his virtue, things that are without qualification good are good, and it is clear that his use of them must also be without qualification excellent and fine); and this is why people think that external goods are the causes of happiness, as if a lyre is responsible for fine and brilliant lyre playing, more than the craft. (*Pol* 7.13: 1332a19-27, my emphasis)[258]

χρήσαιτο δ' ἂν ὁ σπουδαῖος ἀνὴρ καὶ πενίᾳ καὶ νόσῳ καὶ ταῖς ἄλλαις τύχαις ταῖς φαύλαις καλῶς· ἀλλὰ τὸ μακάριον ἐν τοῖς ἐναντίοις ἐστίν (καὶ γὰρ τοῦτο διώρισται κατὰ τοὺς ἠθικοὺς λόγους, ὅτι τοιοῦτός ἐστιν ὁ σπουδαῖος, ᾧ διὰ τὴν ἀρετὴν [τὰ] ἀγαθά ἐστι τὰ ἁπλῶς ἀγαθά, δῆλον δ' ὅτι καὶ τὰς χρήσεις ἀναγκαῖον σπουδαίας καὶ καλὰς εἶναι ταύτας ἁπλῶς)· διὸ καὶ νομίζουσιν ἄνθρωποι τῆς εὐδαιμονίας αἴτια τὰ ἐκτὸς εἶναι τῶν ἀγαθῶν, ὥσπερ εἰ τοῦ κιθαρίζειν λαμπρὸν καὶ καλῶς αἰτιῷντο τὴν λύραν μᾶλλον τῆς τέχνης.

---

[255] Gottlieb 1991: 39-41. Cf. *Top* 3.1: 116b8-10.

[256] καθ' ἑκάστην γὰρ ἕξιν ἴδιά ἐστι καλὰ καὶ ἡδέα

[257] Cf. *Top* 2.12: 115b26-29; *EN* 10.3: 1173b22-25; 10.5: 1176a15-24.

[258] Translation following Reeve 1998.

(Here the context demands that we translate Aristotle's dative of recipient as "for": that which is good without qualification is good for the excellent person. If it merely appeared good to the excellent person, we could hardly call them prosperous and blessed.) Crucially, Aristotle tells us that it is because of or through (διά) the excellent person's virtue that the good without qualification is also good for them. Aristotle's comparison with a lyre player is telling: lyres are only productive of brilliant lyre playing in so far as they are put to good use by the person who is skilled at playing the lyre. Similarly, the excellent person's virtue makes good fortune good for them because they use goods in a way that is without qualification excellent and noble.

Indeed, Aristotle is explicit that what is good without qualification will not always be good for us. He advises that we should not pray for and pursue the goods of good fortune (εὐτυχία) because, even though good fortune is always good without qualification, it is not always good for certain people (τινί). Instead, we should pray that what is good without qualification will be good for us and also choose things that are good for us (*EE* 4.1/*EN* 5.1: 1129b1-6). Putting these two passages together, we might think that what we should pray for is virtue because virtue makes what is good without qualification good *for* us.

In this sense, the virtuous person's virtuous state plays a transformative role in making that which is good without qualification good for them. In order for something without qualification good to be good for someone, it must be the case that it's nature is such that it is good without qualification *and* the person is in a virtuous state. That is to say, in order for goods to be good for someone depends not only on the nature of the good but also on the nature of the person who apprehends and receives it. And the person's virtue plays a causal or transformative role in making what is good by nature also good for them.

We might conclude, then, that the virtue of wisdom is such that the objects and activities of wisdom appear good to the wise person. For this, as I have proposed, the wise person's wisdom must be accompanied by and involve a love of wisdom. Without this, their contemplative activity will fail to be an activity of complete happiness, because it will neither be most pleasant nor will it be loved and chosen for its own sake. In this sense the virtue of theoretical wisdom is explanatory of the fact that contemplation is superlatively good *for* the wise person. One fails to have the virtue of wisdom if one doesn't also love wisdom and, as such, one will fail to achieve complete happiness. Indeed, the fact that wisdom requires a love of wisdom can explain the sense in which wisdom is valuable: wisdom plays a transformative role, such that the activity of contemplation is superlatively good for the wise person.[259]

It's important to make clear, however, the sense in which the value of theoretical wisdom is thus explained. It isn't the case that theoretical wisdom is its own source of value. Rather, Aristotle's thought is that the source of value of theoretical wisdom is found in the fact that theoretically wise contemplative activity is the best activity, of the best part of us, concerned with the best objects. The value of theoretical wisdom is thus to be found in the fact that we perform the best activity *well* in accordance with theoretical wisdom, such that the best activity is also superlatively good for us. I understand a source of value to be that from which value flows, i.e. an origin of value, such that: if x is valuable because of its relation to y, then y is x's source of value.[260] As such, x has extrinsic value in this respect, i.e. in virtue of its relational properties with respect to y, rather than its intrinsic, non-relational properties. The possible types of relation are various, e.g. they might be instrumental (health is the source of value of walking, if walking is an instrument to health), teleological (truth is the source of value of belief, if belief aims at truth), indicative (intelligence is the source of value of the outcome of a test, if the test

---

[259] See also Annas 1998: 45-51.

[260] Cf. Korsgaard 1986: 488

indicates intelligence), contributory (the symphony is the source of value of a dissonant chord, if the dissonant chord contributes to the symphony), etc.[261] In all such cases, if y is the source of value of x, then y must feature in the explanation of the value of x, because it is the reason for and cause of x's value (at least in that respect: x may be valuable for other reasons as well). But the explanation must also contain facts about x and its relation to y, such that value is conferred from y to x. In this sense, the source of theoretical wisdom's value is found in the goodness of the activity of theoretically wise contemplation, and theoretical wisdom is valuable in virtue of the fact that we achieve the goodness of contemplative activity in virtue of contemplating in accordance with theoretical wisdom. In virtue of being theoretically wise, we thus achieve the goodness that contemplation affords.

This is directly analogous to the case of virtuous action: whilst it's good to perform virtuous actions, the mere performance of virtuous actions is not an activity of happiness (and in this sense not good for the agent) unless it is performed virtuously, such that the agent chooses the action because of itself. Otherwise put, it is only an activity of happiness if the agent is the author of their actions, such that their actions are an expression of the virtuous agent's character and preferential choice (see §6.2.2.2). Similarly in the case of theoretical wisdom: whilst it might be good in some sense to contemplate (it is, after all, still a good activity), engaging in contemplation is not an activity of happiness unless it is performed with virtuous motivations, as an expressions of the theoretically wise person's character and preferential choice. Theoretical wisdom has value, then, in so far as it transforms the superlatively good activity of contemplation into an activity that is superlatively good *for* the contemplator.

This returns us to the challenge of Plato's value problem. Consider again the road to Larissa. In this example, having access to truth is instrumentally valuable on acting successfully, i.e. on getting to Larissa, such that it need not matter that one knows and understands such truths for oneself. After all, one could very well (and

---

[261] Cf. Olson 1967. Note, also, that x can plausibly be finally valuable, i.e. valuable for its own sake, but not the source of its own value, e.g. someone might value a pair of David Bowie's trousers for their own sake, but this final value depends on the relationship of the trousers to David Bowie.

very reliably) get to Larissa by following the instructions of a GPS. So, if Aristotle is to claim that theoretical wisdom is valuable, he must provide us with an account of the value of theoretical truth, such that the specific way the theoretically wise person grasps it is necessary for attaining its value. Aristotle provides just this with his account of the good of contemplation: the value of grasping theoretical truth well is that, in so doing, one's contemplative activity is constitutive of happiness. In order to achieve this, the theoretically wise contemplator must fulfil analogues of all three of Aristotle's agential conditions for virtuous action: in addition to grasping theoretical truth with knowledge and understanding and from a stable state, they must also choose to grasp truth for its own sake. Without this, the characteristic activity of theoretical wisdom will not be superlatively good for the contemplator. In addition, this provides Aristotle with an answer to the hard value problem: the theoretically wise person's grasp of theoretical truth isn't valuable merely in virtue of the fact that they have a persistent grasp of theoretical truth. In addition, they grasp theoretical truth with both (i) knowledge and understanding and (ii) virtuous motivations, such that their contemplative activity is superlatively valuable.

6.5. Conclusion

In this chapter, I have offered an initial defence of Aristotle's view that a love of wisdom is either typical of or necessary for theoretical wisdom. On this view, being a lover of wisdom is necessary for possessing the *virtue* of theoretical wisdom. A lover of wisdom ascribes final value to the objects and activities of wisdom, such that they love and choose contemplation for its own sake and take maximal pleasure in contemplative activity. I argued that the theoretically wise person's evaluative stance is necessary for their contemplation to be an activity of complete or perfect happiness because, without this, their contemplating will not be good and pleasant for them. A love of wisdom is thus necessary for achieving the full value that wisdom affords. I also offered a reading of Aristotle's account of the virtuous person as a standard and measure, according to which virtue has a transformative nature: virtue makes good things good for the virtuous person. I used this to

explain the sense in which the theoretically wise person's evaluative stance explains the value of theoretical wisdom: the virtue of theoretical wisdom transforms the objects and activities of wisdom into something good for the theoretically wise person. On this view, the virtue of theoretical wisdom is a particular way of relating to theoretical truth, one which requires that the wise person occupies a particular evaluative stance with respect to the proper activities and objects of theoretical wisdom. Accordingly, Aristotle distinguishes wisdom from non-virtuous but factive epistemic states that grasp the very same truths as wisdom along both epistemic and evaluative lines: one can fail to achieve the value of theoretical wisdom if one fails to love theoretical truth for its own sake, just as much as one can fail if one fails to grasp theoretical truth with knowledge and understanding. Aristotle thus goes some way towards answering Plato's value problem: wisdom is more valuable than other non-virtuous epistemic states that have a persistent and knowledgeable grasp of theoretical truth, because only the theoretically wise person (in virtue of their love of wisdom) achieves the full goodness that theoretical wisdom affords.

7. Theoretical wisdom and knowing the good

7.1. Introduction

In the previous chapter, I argued that a love of wisdom is necessary for the virtue of wisdom, because loving wisdom transforms the activity of contemplation into something good for the theoretically wise person. In particular, the theoretically wise contemplator contemplates virtuously (i.e. wisely) in part because they choose to contemplate for its own sake and because contemplative activity is superlatively pleasant to them. Accordingly, the virtue of theoretical wisdom is valuable because it is that in virtue of which the theoretically wise person's contemplative activity is an activity of complete happiness. On this view, the virtue of wisdom is a composite of two parts: the epistemic (i.e. the knowledge and understanding that is constitutive of wisdom) and the evaluative (e.g. choosing to contemplate for its own sake, taking pleasure in contemplation, loving wisdom). Given this framework, it's conceivable that someone could be epistemically wise (i.e. have the knowledge and understanding that is constitutive of wisdom) without also loving wisdom, just as someone can be a lover of wisdom but not yet be wise. This person would miss out on the proper value of wisdom because their contemplative activity would not be an activity of complete happiness. But, from an epistemic point of view, they should nonetheless be described as wise, even if they are not virtuously wise, i.e. because they lack the evaluative aspect of the virtue of wisdom (see also §6.2).

In this chapter, I argue for a stronger thesis according to which there is an evaluative aspect of wisdom that cannot be separated from the epistemic. On this view, theoretical wisdom is an evaluative epistemic state: in order to be epistemically wise (i.e. to have the knowledge and understanding that is constitutive of wisdom) it is necessary that the wise person evaluates the objects of theoretical wisdom as good. Otherwise put: to fail to evaluate the objects of theoretical wisdom as good is an epistemic failure, such that if someone knows a proper object of theoretical wisdom, x, but fails to evaluate x as good, then they

should not be said to be theoretically wise in respect of x – there is more for them to know about x, i.e. its goodness.

There is *prima facie* textual motivation for pursing this line of interpretation. As previously argued (§5.4.4), Aristotle describes the theoretically wise person as characteristically being a lover of wisdom. The present chapter thus offers a way to understand this thought: theoretical wisdom is an evaluative epistemic state, such that someone who knows the proper objects of wisdom but fails to evaluate them as good is not even epistemically wise – there is more for them to know. The theoretically wise person is necessarily a lover of wisdom, then, in so far as the theoretically wise person necessarily evaluates the objects of wisdom as good. This, in turn, provides us with further philosophical motivation to understand theoretical wisdom as an epistemic virtue: because theoretical wisdom is an evaluative epistemic state, there is an evaluative aspect of wisdom that is part of the epistemic state itself (rather than appended to it as an additional evaluative or motivational component, as theoretical wisdom is treated in Chapter 6). As a consequence, it's not possible to wholly distinguish between someone who has the virtue of wisdom (i.e. who manifests both the epistemic and the evaluative aspects of wisdom) and someone who is merely epistemically wise, because there is an evaluative aspect of theoretical wisdom that is a necessary part of having the knowledge and understanding that is constitutive of wisdom.

I first turn to Aristotle's account of σοφία in *Nicomachean Ethics* 6.7 (§7.2). I argue that Aristotle ultimately argues for his peculiarly theoretical account of σοφία on the basis of the Good Objects Principle, according to which value is imparted on a body of knowledge by its proper objects. Aristotle thus claims that theoretical wisdom is the best epistemic state in virtue of its being concerned with the best objects. I then offer an account of theoretical wisdom as an evaluative epistemic state in order to explicate the Good Objects Principle (§7.3): value is imparted on theoretical wisdom by its proper objects because (i) its proper objects are genuine instances of goodness and (ii) to know them (in the fullest sense) demands evaluating them as genuine instances of goodness. This adds to the sense in which the theoretically wise person grasps theoretical truth most of all or well: the

theoretically wise person grasps and so appreciates the goodness of the proper objects of theoretical wisdom. Theoretical wisdom thus derives value from the fact that one must evaluate its objects as good in order to know them well.

7.2. Σοφία and the Good Objects Principle in *Nicomachean Ethics* 6.7

In this section, I argue for the following claims about Aristotle's account of σοφία in *Nicomachean Ethics* 6.7:

(1) Aristotle works with the assumption that σοφία is the best epistemic state;

(2) Aristotle argues that σοφία should be identified with theoretical wisdom, as opposed to practical wisdom or political science;

(3) Aristotle employs and ultimately relies upon the Good Objects Principle in support of (2), according to which value is imparted on a body of knowledge by its proper objects, such that its proper objects are a source of value for that knowledge. Consequently, theoretical wisdom is the best epistemic state in virtue of its proper objects.

(1) expresses the uncontroversial assumption that σοφία is, in some sense, the best epistemic state. In this sense, σοφία acts as a placeholder for the epistemic state that is superlatively valuable. (2) is controversial because it makes claims about the content of σοφία, i.e. that theoretical wisdom is the best epistemic state. Aristotle's arguments in the *Nicomachean Ethics* show that he was aware that both practical wisdom and political science are candidates for the best epistemic state, in part because they are concerned with the practicable human good. Aristotle must therefore offer a strong case for identifying σοφία with theoretical wisdom (which, on Aristotle's view, in no way considers the practicable human good).[262] (3) is

---

[262] I leave σοφία untranslated because of the controversial nature of (2): Aristotle certainly considered σοφία to be theoretical, but to translate it as such throughout *Nicomachean Ethics* 6 would be to presuppose that σοφία *is* theoretical. This is something that Aristotle must argue for.

Aristotle's ultimate defence of the superiority of *theoretical* wisdom: the proper objects of theoretical wisdom are most estimable and divine, hence theoretical wisdom is the most estimable and divine (and thus best) epistemic state. In §7.3, I provide an account of theoretical wisdom as an evaluative epistemic state in order to explicate the sense in which value is imparted on a body of knowledge by its proper objects, such that (3) does in fact support (2).

7.2.1.   Theoretical wisdom versus practical wisdom and political science

The text of *Nicomachean Ethics* 6.7 can be divided into seven sections:

[1] Argument that σοφία is the most exact body of knowledge (1141a9-17);

[2] First characterisation of σοφία (1141a17-20);

[3] Best Objects Argument (1141a20-22);

[4] Plurality Arguments (1141a22-b2);

[5] Second characterisation of σοφία (1141b2-3);

[6] Account of Thales and Anaxagoras as characteristic οἱ σοφοί (1141bb3-8);

[7] Further characterisation of φρόνησις (1141b8-23).

In [2], Aristotle characterises σοφία as a body of demonstrative knowledge concerned with the most estimable objects:[263]

T7.1   Consequently, the σοφός man must not only know the things [that are demonstrated] from the first principles, but he must also grasp the truth concerning the first principles. Therefore, σοφία will be intellect and [demonstrative] knowledge – knowledge having a head, so to speak, of the most estimable things. (*EN* 6.7: 1141a17-20)

---

[263] In the following, I use "demonstrative knowledge" to refer to the combination of ἐπιστήμη and νοῦς, i.e. knowledge of demonstrations accompanied by a non-demonstrative grasp of the first principles of those demonstrations.

δεῖ ἄρα τὸν σοφὸν μὴ μόνον τὰ ἐκ τῶν ἀρχῶν εἰδέναι, ἀλλὰ καὶ περὶ τὰς ἀρχὰς ἀληθεύειν. ὥστ' εἴη ἂν ἡ σοφία νοῦς καὶ ἐπιστήμη, ὥσπερ κεφαλὴν ἔχουσα ἐπιστήμη τῶν τιμιωτάτων.

Sixteen lines later (section [5]), Aristotle adds that:

T7.2   From what has been said, then, it is clear that σοφία is both [demonstrative] knowledge and intellect of things most estimable by nature. (*EN* 6.7: 1141b2-3)

ἐκ δὴ τῶν εἰρημένων δῆλον ὅτι ἡ σοφία ἐστὶ καὶ ἐπιστήμη καὶ νοῦς τῶν τιμιωτάτων τῇ φύσει.

Aristotle thus characterises σοφία as distinctly theoretical, in a number of senses: (i) it is a demonstrative body of knowledge and therefore concerned with truths that are both necessary and eternal (6.3: 1139b19-24, 31-32, 6.6: 1140b31-1141a1); (ii) it is concerned with things that are most estimable by nature, e.g. 'the beings from which the universe is composed' (6.7: 1141b1-2);[264] (iii) it isn't concerned with the practicable human good (6.7: 1141b3-5, 9-12). Indeed, Aristotle reports that both Thales and Anaxagoras are thought to be σοφός and that 'what they know is said to be extraordinary, wondrous, difficult, and blessed, but useless – because it is not human goods that they seek' (6.7: 1141b6-8).[265]

Between T7.1 and T7.2, Aristotle provides two arguments to the effect that σοφία is not the same as either practical wisdom (φρόνησις) or political science (ἡ πολιτική). In the first case (section [3]), he argues that neither practical wisdom nor political science could be the most excellent (σπουδαιότατον) intellectual state because both are concerned with humans. Given that humans are not the best (ἄριστον) thing in the universe, Aristotle claims that it would be strange to think that either practical wisdom or political science is the most excellent intellectual

---

[264] ἐξ ὧν ὁ κόσμος συνέστηκεν

[265] περιττὰ μὲν καὶ θαυμαστὰ καὶ χαλεπὰ καὶ δαιμόνια εἰδέναι αὐτούς φασιν, ἄχρηστα δ', ὅτι οὐ τὰ ἀνθρώπινα ἀγαθὰ ζητοῦσιν.

state. Call this the *Best Objects Argument*.[266] In the second case (section [4]), Aristotle argues that σοφία is the same for everyone, whereas practical wisdom is different for each kind of creature because the good and the beneficial is different for each type of creature, e.g. to be practically wise *qua* human is different from being practically wise *qua* chimpanzee. Σοφία and practical wisdom cannot be identical, then, because the former is one and the latter a plurality. Aristotle also mounts an analogous argument in the case of political science. Call these the *Plurality Arguments*.[267]

Both the Best Objects and Plurality arguments make clear that a central concern of *Nicomachean Ethics* 6.7 is not only to assert that σοφία is distinctly theoretical, but also to deny that σοφία should be identified with either practical wisdom or political science.[268] And we should expect Aristotle to provide substantial argument in favour of this claim. Aristotle works with the relatively uncontroversial assumption that, whatever σοφία is, it is the best intellectual state. But all manner of different types of people were contenders for being σοφός, including political actors, poets, orators, craftspeople, so-called sophists, and philosophers, amongst others. Lists of the so-called seven wise men (if we are to take them seriously) nearly exclusively include men known for their political acumen.[269] Indeed, an opponent of Aristotle's might well argue that σοφία should be identified with practical wisdom precisely because practical wisdom is concerned with the practicable human good. On this view, practical wisdom is the best epistemic state (and so deserving of the title of σοφία) because it is the most valuable epistemic state for us to achieve. What's so good, they might ask, about being theoretically wise when theoretical wisdom isn't concerned with practicable human goods? Call this challenger the *Proponent of Practical Wisdom*. In what follows, I use the Proponent's challenge to show that Aristotle ultimately relies on

---

[266] Cf. *Met* 1.2: 983a4-11.

[267] Cf. *Met* 1.2: 982a8-10, 21-23.

[268] See also Richardson Lear 2004: 108-115.

[269] E.g. Plato *Protagoras*: 342e-343b, Diogenes Laertius *Lives of Eminent Philosophers*: 1.13.1-5.

the Best Objects Argument to explain why the best epistemic state is theoretical wisdom, such that theoretical wisdom should be identified with σοφία. On this view, only the Best Objects Argument is sufficient to account for the superlative value of theoretical wisdom because it is the only consideration (at least presented by Aristotle) that isolates the source of theoretical wisdom's value, i.e. its good objects.

7.2.2. *The insufficiency of exactitude*

In addition to the Best Objects and Plurality arguments, Aristotle initially argues for his characterisation of σοφία in T7.1 on the grounds that σοφία is the most exact body of knowledge.[270] At the beginning of *Nicomachean Ethics* 6.7, Aristotle observes that wisdom in the crafts is ascribed to its most exact practitioners (τοῖς ἀκριβεστάτοις). For example, Aristotle describes Phidias as a wise stonemason (the master-sculptor famed for the statues of Athena in the Parthenon and on the Acropolis, 1141a9-11). Aristotle notes, however, that in all such cases "σοφία" simply refers to the virtue of that craft. Whilst exactitude might be a sign of σοφία, then, wisdom is not properly ascribed to those who are merely σοφός with respect to a particular field. Indeed, σοφία is most properly applied to those who are wise in general or according to the whole (ὅλως) (1141a11-14).[271] From this, Aristotle concludes (ὥστε) that σοφία must be the most exact body of knowledge (ἀκριβεστάτη τῶν ἐπιστημῶν, 1141a16-17). This being established, Aristotle makes his claim that σοφία is a demonstrative body of knowledge of the most estimable things (T7.1).

But relying on exactitude is insufficient for Aristotle's claims about the nature of σοφία, and for two reasons. In the first case, it's unclear whether exactitude ensures that theoretical wisdom is, as Aristotle claims, a demonstrative body of knowledge *of the most estimable objects*, e.g. the beings from which the

---

[270] See also *Met* 1.1: 981a28-b6.

[271] Cf. *EN* 6.5: 1140a27-28 and Richardson Lear 2004: 109.

universe is composed. Elsewhere Aristotle gives a number of different criteria for relative exactitude.[272] Three are presented in *Posterior Analytics* 1.27:

T7.3 One body of knowledge is more exact than and prior to another body of knowledge [if] [i] it is of both the fact and the reason why, and not the fact separately from the reason why, [ii] it is not according to an underlying subject [and] the other is according to an underlying subject, e.g. arithmetic [is more exact than] harmonics, or [iii] it is from fewer [items] [and] the other is from [something] additional, e.g. arithmetic [is more exact than] geometry. And by "from [something] additional" I mean, e.g. "a unit is a substance without position" and "a point is a substance with position"; the latter is from [something] additional. (*APo* 1.27: 87a31-37)

Ἀκριβεστέρα δ' ἐπιστήμη ἐπιστήμης καὶ προτέρα ἥ τε τοῦ ὅτι καὶ διότι ἡ αὐτή, ἀλλὰ μὴ χωρὶς τοῦ ὅτι τῆς τοῦ διότι, καὶ ἡ μὴ καθ' ὑποκειμένου τῆς καθ' ὑποκειμένου, οἷον ἀριθμητικὴ ἁρμονικῆς, καὶ ἡ ἐξ ἐλαττόνων τῆς ἐκ προσθέσεως, οἷον γεωμετρίας ἀριθμητική. λέγω δ' ἐκ προσθέσεως, οἷον μονὰς οὐσία ἄθετος, στιγμὴ δὲ οὐσία θετός· ταύτην ἐκ προσθέσεως.

Elsewhere, Aristotle also suggests that one body of knowledge is less exact than another [iv] if its objects hold only for the most part (*EN* 1.3: 1094b11-27).[273] Let's suppose with Aristotle that the fact that σοφία is the most exact body of knowledge is sufficient to show that σοφία must be a demonstrative body of knowledge, e.g. because demonstrative bodies of knowledge are typically concerned with the fact as well as the reason why.[274] Nonetheless, it's not clear that the most exact body of demonstrative knowledge will be concerned with the most estimable objects, e.g. the beings from which the universe is composed. This is because it's not clear that demonstrative knowledge of such beings would be more exact than, say, demonstrative mathematical knowledge. Indeed, as many of Aristotle's examples in T7.3 suggest, some branches of mathematics could well turn out to be the most exact body of knowledge. As Aristotle conceives of them, mathematical sciences

---

[272] See also Barnes 1994: 189, Lesher 2010.

[273] Cf. *APo* 1.24: 86a16-17: one demonstration is less exact than another if it is further from first principles. Since this criterion compares the exactitude of demonstrations rather than bodies of knowledge, I do not list it above.

[274] See also Richardson Lear 2004: 109-112.

deal in explanations (*APo* 1.13: 78b39-79a13), thus meeting criteria (i); are more exact because they do not involve matter (*Met* 2.3: 995a15-16), thus meeting criteria (ii); and certainly are not concerned with what holds for the most part, thus meeting criteria (iv).[275] Perhaps a sign of this is that, when Aristotle distinguishes in the *Metaphysics* between three types of theoretical knowledge (natural, mathematical, and theological), he claims that theological knowledge is best because it is concerned with the most estimable objects and 'each [body of knowledge] is said to be better or worse according to its proper object of knowledge' (*Met* 11.7: 1064b1-6, cf. 6.1: 1026a8-32).[276] I'll return to this passage below. For now, note that Aristotle does not here draw upon the greater exactitude of theological theoretical knowledge to show its superiority to mathematical theoretical knowledge, but rather defers to the goodness of its objects. This might be because Aristotle didn't consider theological theoretical knowledge to exceed mathematical theoretical knowledge with respect to exactitude. Given this, we should be wary of the thought that Aristotle intends to defend his account of σοφία in the *Nicomachean Ethics* 6.7

---

[275] How does mathematics fare in relation to [iii]? This is hard to judge. On the one hand, Aristotle is explicit in *Metaphysics* 1.2 that he considers his version of σοφία to be the most exact body of knowledge on the grounds that it is concerned most of all with the first things (τὰ πρῶτα), citing principle [iii]: knowledge that proceeds from fewer posits is more exact, e.g. arithmetic is more exact than geometry (982a25-28). Perhaps, then, Aristotle's thought is that σοφία, understood as the science of first causes and first principles, will depend upon fewer posits, e.g. in the sense that the natural philosopher must posit the existence of sublunary matter, whereas the first philosopher need not – *their* study is of being *qua* being such that there are no further posits to be made. It's not clear, however, why this should favour theology over mathematics: does mathematics depend upon the posits of being? What's more, as Barnes notes, πρόσθεσις is the opposite of abstraction (ἀφαίρεσις) (Barnes 1994: 190). Perhaps, then, knowledge of the first things is knowledge at a greater level of abstraction. Again, however, it's unclear whether mathematics wouldn't nonetheless be superlatively abstract and so most exact (*Met* 13.3: 1078a9 *ff.*). Taking this point further would require a more careful study both of Aristotle's notion of πρόσθεσις and his philosophy of mathematics, e.g. as presented in *Metaphysics* 13. I won't go down this path; even if Aristotle's criteria for exactitude do determine that σοφία could only be demonstrative knowledge of the most estimable things, relying upon exactitude is insufficient as a response to the Proponent of Practical Wisdom (see below).

[276] […] βελτίων δὲ καὶ χείρων ἑκάστη λέγεται κατὰ τὸ οἰκεῖον ἐπιστητόν.

by resting too heavily on the thought that σοφία is the most exact body of knowledge.

A second reason to be sceptical concerns the value of exactitude. It might be true that acquiring the most exact body of knowledge is an extremely demanding intellectual accomplishment, but it's not clear what's good about this. Suppose, for instance, that practical wisdom is indeed less exact (in Aristotle's sense) than Aristotle's brand of theoretical wisdom in *Nicomachean Ethics* 6.7. Suppose also that acquiring more exact knowledge is indeed more demanding than acquiring less exact knowledge, such that acquiring theoretical wisdom is more of an intellectual accomplishment than practical wisdom.[277] The Proponent of Practical Wisdom might agree with all of this, but nonetheless deny that the most exact knowledge is best, because exactitude isn't a source of value. For example, if someone were to come to know the number of pebbles on Brighton beach to the nearest 100 pebbles, this would certainly be a demanding intellectual accomplishment in virtue of its exactitude (and, indeed, the more exact the more demanding). But such knowledge may nonetheless be trivial.[278] Indeed, this knowledge is plausibly less valuable than knowledge that is less demanding *qua* exactitude but has a direct bearing on what's good for us as humans, i.e. practical wisdom. Of course, knowledge of the number of pebbles on Brighton beach isn't exact in Aristotle's sense, but the example is nonetheless instructive: the Proponent of Practical Wisdom who thinks that knowledge of the human good is the most valuable type of knowledge may insist that practical wisdom should be given the honorific title of σοφία (i.e. the best epistemic state) in spite of its being less exact (in Aristotle's sense).[279,280]

---

[277] This isn't obvious, but Aristotle certainly thought that his brand of theoretical wisdom is the hardest to acquire (*EN* 6.7: 1141b6-7, *Met* 1.2: 982a10-12, 23-25).

[278] Cf. Sosa 2003: 156.

[279] I am thus in disagreement with Richardson Lear's claim that theoretical wisdom deserves the title of σοφία because it is an 'intellectual accomplishment' (Richardson Lear 2004: 111, cf. 113-114).

[280] A challenge along similar lines is mounted by Isocrates in the *Antidosis* (261-269). Isocrates argues that philosophical study and subjects such as geometry and arithmetic are at best valuable as a training for the mind: they make us both willing and able to tackle difficult and more serious intellectual problems. On this account, theoretical

7.2.3. The Good Objects Principle

This is not to suggest that Aristotle didn't consider exactitude to be of epistemic value, but rather that Aristotle's claims about exactitude won't suffice for the thought that theoretical wisdom is the best epistemic state. Fortunately, however, Aristotle elsewhere makes clear that exactitude is not the only measure of the value of a body of knowledge. Take, for example, Aristotle's comments at the beginning of the *De Anima*:

T7.4   We suppose that cognition is among the fine and estimable things, but one is more so than another either according to its exactitude or having both better and more marvellous objects, [and] because of both of these it would be reasonable to place inquiry into the soul in first-place. And it also seems that knowledge of this contributes greatly towards the whole truth, and most of all towards [truth] in respect of nature; for, [the soul] is a sort of first principle of animals. (*DA* 1.1: 402a1-7)[281]

Τῶν καλῶν καὶ τιμίων τὴν εἴδησιν ὑπολαμβάνοντες, μᾶλλον δ' ἑτέραν ἑτέρας ἢ κατ' ἀκρίβειαν ἢ τῷ βελτιόνων τε καὶ θαυμασιωτέρων εἶναι, δι' ἀμφότερα ταῦτα τὴν περὶ τῆς ψυχῆς ἱστορίαν εὐλόγως ἂν ἐν πρώτοις τιθείημεν. δοκεῖ δὲ καὶ πρὸς ἀλήθειαν ἅπασαν ἡ γνῶσις αὐτῆς μεγάλα συμβάλλεσθαι, μάλιστα δὲ πρὸς τὴν φύσιν· ἔστι γὰρ οἷον ἀρχὴ τῶν ζώων.

---

study is instrumentally valuable towards other practically oriented forms of knowledge: 'subjects of greater excellence and more worth' (τὰ σπουδαιότερα καὶ πλέονος ἄξια τῶν πραγμάτων, 265, cf. 267). Notably, Isocrates characterises geometry and astronomy as exact (264). As such, Isocrates is an opponent who is able to accommodate Aristotle's thought that exactitude is of epistemic value, but along different lines: exact knowledge is useful because exactitude is a transferable skill. If so, the value of philosophical knowledge such as theoretical wisdom will be subordinated to the worth of other types of knowledge, where exactitude comes in useful. Notably, Aristotle was well aware of such challenges and portrays Isocrates making similar complaints in the *Protrepticus* (Ross fr. 3, 5).

[281] Translation following Shields 2016.

We may extend Aristotle's thought to bodies of knowledge: one body of knowledge (E_1) is finer and more estimable than another (E_2), if either (i) E_1 exceeds E_2 in exactitude or (ii) E_1 has both better and more marvellous objects than E_2. Notably, Aristotle's disjunctive formulation in T7.4 allows for the possibility that E_2 is more exact than E_1, but that E_1 nonetheless exceeds E_2 in value because E_1 has better and more wondrous objects (in a manner that outweighs the value of the greater exactitude of E_2). For example, Aristotle might claim that knowledge of the soul is more estimable than geometry, even though geometry is more exact than knowledge of the soul, because the soul is a better and more marvellous object of knowledge (in a manner that outweighs the value of geometry's exactitude).

Aristotle appears to deploy just this thought in *Nicomachean Ethics* 6.7. In section [1], Aristotle initially argues that σοφία is the most exact body of knowledge (1141a9-17). From this, Aristotle infers (δει) that the σοφός person must know both demonstrations and the first principles of demonstrations (1141a17-18), before concluding (ὥστε) not only that σοφία is a demonstrative body of knowledge, but also that it is a demonstrative body of knowledge *of the most estimable things* (1141a18-20, section [2]). Why this addition? A likely explanation is that Aristotle doesn't think that the exactitude of a body of knowledge is sufficient for it to be the best epistemic state. Consequently, Aristotle argues that σοφία is not only demonstrative (and so most exact) but also has the best objects, and then supports this addition with the Best Objects Argument (section [3]).[282]

In so doing, Aristotle relies upon the principle that value is imparted on a body of knowledge by its proper objects being better or more marvellous. Indeed, this is a principle that Aristotle also commits to in *Metaphysics* 11.7:

T7.5   It is clear, therefore, that there are three kinds of theoretical knowledge: natural, mathematical, and theological. And so, the best is the theoretical kind, and of these themselves the last named; for, it is concerned with the

---

[282] Similarly, Aristotle's theoretical account of σοφία in *Metaphysics* 1.2 does not merely depend upon the exactitude of theoretical wisdom (982a4-b10). Perhaps notably, Aristotle is also explicit that exactitude isn't to everyone's taste (*Met* 2.3: 995a8-12).

most estimable of beings, and each [knowledge] is said to be better and worse according to its proper knowable object. (*Met* 11.7: 1064b1-6)

δῆλον τοίνυν ὅτι τρία γένη τῶν θεωρητικῶν ἐπιστημῶν ἔστι, φυσική, μαθηματική, θεολογική. βέλτιστον μὲν οὖν τὸ τῶν θεωρητικῶν γένος, τούτων δ' αὐτῶν ἡ τελευταία λεχθεῖσα· περὶ τὸ τιμιώτατον γάρ ἐστι τῶν ὄντων, βελτίων δὲ καὶ χείρων ἑκάστη λέγεται κατὰ τὸ οἰκεῖον ἐπιστητόν.

Aristotle makes clear that the esteem or value of a type or body knowledge is in accordance with the esteem or value of its proper objects. We may suppose, then, that value is imparted on a type or body of knowledge by its proper objects, such that the proper objects of a body of knowledge are a source of value for that knowledge. Call this the *Good Objects Principle*.[283] Admittedly, κατὰ τὸ οἰκεῖον ἐπιστητόν may be read as indicating mere correlation between the value of a body of knowledge and the value of its proper objects, but Aristotle's point must be stronger if the Best Objects Argument in *Nicomachean Ethics* 6.7 is to meet the challenge of the Proponent of Practical Wisdom. The Proponent claims that practical wisdom is superlatively valuable because of the nature of its objects, i.e. the practicable human good. As such, the Best Objects Argument cannot merely rely on the thought that the value of theoretical wisdom is correlative with the value of its objects. Aristotle must also explain why theoretical wisdom is more valuable than practical wisdom, i.e. that theoretical wisdom is superlatively valuable because (i) it is of the most estimable objects and (ii) value is imparted on a body of knowledge by its proper objects.

This also helps explain Aristotle's response to an objection to the Plurality Arguments. At the end of section [4], Aristotle immediately blocks a potential objection to the Plurality Arguments by returning to his thought that σοφία is concerned with the best objects:

T7.6   And it makes no difference if human beings are the best of the other animals; for, also, there are things far more divine than humans according to

---

[283] See also *Met* 1.2: 983a4-11, *EE* 1.5: 1216b19-20.

nature, e.g. the most evident at least the beings from which the universe is composed. (*EN* 6.7: 1141a33-b2)

εἰ δ' ὅτι βέλτιστον ἄνθρωπος τῶν ἄλλων ζῴων, οὐδὲν διαφέρει· καὶ γὰρ ἀνθρώπου ἄλλα πολὺ θειότερα τὴν φύσιν, οἷον φανερώτατά γε ἐξ ὧν ὁ κόσμος συνέστηκεν.

We might imagine that the Proponent of Practical Wisdom responds to the Plurality Arguments by accepting that there will be many practical wisdoms, one for every type of creature, but insisting that human practical wisdom is the best epistemic state because of the nature of its object, i.e. the practicable human good. In response, Aristotle returns to the Best Objects Argument and thus the Good Objects Principle: theoretical wisdom is better than human practical wisdom because the objects of theoretical wisdom are better and more estimable than the practicable human good. In so doing, Aristotle explains and so defends the superlative value of theoretical wisdom by pointing to its source of value, i.e. the divine nature of its proper objects.

In sum, *Nicomachean Ethics* 6.7 (i) argues that σοφία (i.e. the best epistemic state) is theoretical wisdom; (ii) denies that σοφία is either practical wisdom or political science; and (iii) ultimately achieves this on the basis of the Good Objects Principle. With this, Aristotle is able in principle to meet the complaints of the Proponent of Practical Wisdom: theoretical wisdom is a better epistemic state than practical wisdom, because theoretical wisdom is of the best knowable objects. But so far Aristotle has only achieved this *in principle*: Aristotle must offer an account of how value is imparted on a body of knowledge by its proper objects, such that theoretical wisdom is indeed better than practical wisdom. Significantly, the Proponent of Practical Wisdom is in a strong position in this respect: practical wisdom is clearly valuable because it is concerned with the practicable human good, such that the practically wise person is able to achieve the practicable human good (all other things being equal). It's not obvious, however, why knowing about the most estimable objects should be valuable for the person who knows them, precisely because such knowledge has no bearing on the practicable human good. Now, it is of course Aristotle's view that theoretical wisdom is valuable because

theoretical wisdom is necessary to contemplate well and thus achieve complete happiness. However, it's notable that in *Nicomachean Ethics* 6.7 Aristotle argues that theoretical wisdom is the best epistemic state without recourse to the relationship between contemplation and happiness.[284] The challenge for Aristotle, then, is to explain the sense in which value is imparted on theoretical wisdom by its proper objects.

7.3. Explicating the Good Objects Principle

In this section, I provide an account of how value is imparted on theoretical wisdom by its proper objects. I argue that Aristotle conceives of theoretical wisdom as an evaluative epistemic state. In order to be epistemically wise (i.e. to have the knowledge and understanding that is constitutive of wisdom) it is necessary that the wise person evaluates the objects of theoretical wisdom as good. Otherwise put: to fail to evaluate the objects of theoretical wisdom as good is an epistemic failure, such that if someone knows a proper object of theoretical wisdom, x, but fails to evaluate x as good, then they should not be said to be theoretically wise in respect of x – there is more for them to know about x, i.e. its goodness. This conception of theoretical wisdom is able to explicate the Good Objects Principle as follows: value is imparted on theoretical wisdom by its proper objects because knowing and understanding the proper objects of theoretical wisdom (in the fullest sense, i.e. well) demands knowing and thus evaluating them as genuine instances of goodness. The proper objects of theoretical wisdom are therefore valuable for the theoretically wise person to know, because they evaluate them as good.

I argue for this explication of the Good Objects Principle with two examples: (i) the divine Prime Mover as the teleological cause of the motion of the primary heaven (*Met* 12.7, §7.3.1) and (ii) the teleological causes of the parts and structures of animals (*PA* 1.5, §7.3.2). The examples have two aspects in common: both are concerned with final causes as an object of knowledge and both describe final causes as in some sense divine. The latter is particularly important: Aristotle's

---

[284] The same is true for Aristotle's account of theoretical wisdom in *Metaphysics* 1.

invocation of the Good Objects Principle appears to hinge on the thought that theoretical wisdom is superlatively valuable because its objects are most estimable and divine. The first point is not essential for the Good Objects Principle as a general principle, but provides a helpful foil for explicating it: to know a final cause demands that the goodness of the object of knowledge figures in the content of what one knows. I argue that knowing divine, final causes in the fullest sense demands judging the object of knowledge to be a genuine case of goodness and thus evaluating it as something good to know. To fail to do so is constitutive of an epistemic failure: to fail to appreciate the goodness of a divine, final cause is to fail to understand its goodness. The examples thus illustrate a general principle: value is imparted on knowledge by its proper objects when its proper objects include genuine cases of goodness, e.g. divine, final causes. This provides us with a mechanism with which to understand the Good Objects Principle: value is imparted on theoretical wisdom by its proper objects because the proper objects of theoretical wisdom include genuine cases of goodness, e.g. divine, final causes. And because theoretical wisdom is concerned with the most estimable objects, theoretical wisdom is superlatively valuable.

7.3.1. *Preliminaries: theoretical wisdom in Metaphysics 1*

Before proceeding, it's worth making two preliminary points concerning Aristotle's account of theoretical wisdom in *Metaphysics* 1. First, Aristotle's invocation of the Good Objects Principle in *Metaphysics* 1.2 (983a4-11) makes clear that Aristotle not only considers the divine to be a proper object of theoretical wisdom, but the divine is a proper object of theoretical wisdom *as a cause and first principle*. Aristotle argues that theoretical wisdom is the most estimable body of knowledge because it is most divine, and it is most divine for two reasons: first, the knowledge that god has is most divine, and theoretical wisdom either belongs to god solely or most of all; second, knowledge of divine things is itself divine, and 'god seems to everyone to

be among the causes and a certain first principle' (983a8-9).[285] Aristotle thus elaborates on his use of the Good Objects Principle in *Nicomachean Ethics* 6.7: not only are the proper objects of theoretical wisdom divine, but theoretical wisdom is concerned with god as a cause and first principle.[286] I exploit this point in both of the forthcoming examples: in each case, Aristotle describes an object of knowledge both as a cause and as divine, and value is imparted on the knowledge in question in virtue of both of these properties of the object of knowledge.

Second, Aristotle explicitly argues that theoretical wisdom is concerned with final causes: it 'knows that for the sake of which each thing must be done; and this is the good of each thing, and generally the best in every nature' (*Met* 1.2: 982b5-7).[287,288] Aristotle's choice of words here must be somewhat metaphorical: σοφία cannot know that for the sake of which each thing is to be done (πρακτέον) in the sense that practical wisdom or political science knows the practicable human good.

---

[285] ὅ θεὸς δοκεῖ τῶν αἰτίων πᾶσιν εἶναι καὶ ἀρχή τις

[286] Aristotle frames this premise in term of what is commonly thought about god, i.e. what 'seems to everyone' (δοκεῖ πᾶσιν). But it's important that Aristotle endorses this view himself: the claim that god is a proper object of theoretical wisdom as a cause and first principle vindicates Aristotle's claim that wisdom is indeed the most estimable and divine knowledge, because it explains theoretical wisdom's source of value, i.e. its esteem and divine nature.

[287] ἡ γνωρίζουσα τίνος ἕνεκέν ἐστι πρακτέον ἕκαστον· τοῦτο δ' ἐστὶ τἀγαθὸν ἑκάστου, ὅλως δὲ τὸ ἄριστον ἐν τῇ φύσει πάσῃ;

[288] An alternative translation of ὅλως δὲ τὸ ἄριστον ἐν τῇ φύσει πάσῃ is "and generally the best in the whole of nature". For example, Stephen Menn translates along these lines and then reads Aristotle's account of the Prime Mover (PM) in *Metaphysics* 12 as 'carrying out the programme' of *Metaphysics* 1.2, i.e. giving an account of the PM as "the best in the whole of nature" (Menn 1992: 547). However, this interpretation is partisan to a controversial interpretation of Aristotle's PM as an overarching final cause or that which is responsible for a universal, cosmic ordering and goodness (see Kahn 1985, Furley 1985, Sedley 1991, 2000, cf. *Metaphysics* 12.10). I am not partial to this interpretation of *Metaphysics* 12, though I will not here argue against it (see Balme 1972: 96-97, Bodnar 2005, Lennox 2001a: 182-184, 2001b: 341, Johnson 2005: ch. 9, Judson 2005: 348, 359-360, Gotthelf 2012: 8-9 *n*. 13, Leunissen 2010: 41, cf. Henry 2015b). Both sides of this controversy are in agreement that each organism has a nature that at least aims at its own good and flourishing (*Phys* 2.7: 198b5-9). As such, my translation captures the uncontroversial point that theoretical wisdom is at least (and in some general sense) concerned with the good of each thing.

This is because Aristotle considers σοφία to be *theoretical* knowledge of first principles and causes (θεωρητικός, 982b9-10).[289] As Sarah Broadie points out, Aristotle uses πρᾶξις not only to refer to human action, but also to the activities of animals and celestial motions (again, most likely metaphorically) (Broadie 2012: 59 *n*. 33).[290] Consequently, the sense in which each thing 'must be done' most likely refers to the normative standards of that which occurs by nature. For example, if an oak tree is the goal (τέλος) of an acorn, then the acorn ought to grow and develop such that it realises this end.[291] This is not a moral demand but is nonetheless normative. If the acorn does not grow and develop such that it realises its natural end, then its growth and development will be judged bad because it does not achieve its end, i.e. its good. As such, the acorn's goal sets the normative standards for its activities *qua* acorn.[292] Of course, Aristotle must have in mind that theoretical wisdom is concerned with final causes in a manner that is different from the way in which other bodies of knowledge are concerned with final causes. For example, theoretical wisdom clearly isn't concerned with the particular final causes of the species of animals, as the natural philosopher is. Perhaps, then, when Aristotle claims that that σοφία is concerned 'with the good of each thing and *generally* the best in every nature' (my emphasis), he intends that σοφία grasps the good of each thing in a universal or schematic way, just as the wise person has the most universal knowledge and thus knows in a way (πως) everything that falls under it (*Met* 1.2: 982a21-23, cf. 12.7: 1072b18-19). Nonetheless, Aristotle is clear: theoretical wisdom is in some sense concerned with final causes.[293] This will again be important in the examples to come, both of which employ final causes to explain how value is imparted on a body of knowledge by its proper objects.

---

[289] *Pace* Johnson 2005: 273. I am sympathetic with Johnson's rejection of cosmic teleology, but we need not read T7.9 as concerned with the practicable human good in order to avoid such a reading.

[290] E.g. *DC* 2.12: 292a21-24, b1-2.

[291] See also *Phys* 2.1: 193b12-18, 2.2: 194a27-b15, 2.3: 195a23-25. *Pace* Ross 1924: 121.

[292] Richardson Lear 2014: 11-15.

[293] See also *Met* 1.3: 983a26-32, 1.7.

7.3.2.   *Knowing the Prime Mover as a final cause*

As noted, Aristotle uses the Good Objects Principle in *Metaphysics* 1.2 to argue that theoretical wisdom is most estimable and divine because 'god seems to everyone to be among the causes and a certain first principle'. In *Metaphysics* 12, Aristotle describes god (the Prime Mover) as a cause and first principle of the eternal motion of the primary heaven. Aristotle's Prime Mover (PM) is thus an excellent candidate to explicate Aristotle's formulation of the Good Objects Principle in *Metaphysics* 1.2: the PM is a divine cause and first principle and thus an exemplary object of theoretical wisdom as described in *Metaphysics* 1.2.[294] In this section, I argue that knowing the PM as the final cause of the eternal motion of the primary heaven demands evaluating the PM as superlatively good. On this view, not to judge the PM to be superlatively good is an epistemic failure, such that one does not count as knowing (in the fullest sense) the PM as a final cause unless one judges the PM to be superlatively good. I further argue that this judgement imparts value on theoretical

---

[294] This depends in part on how we view the relationship between *Metaphysics* 1 and the remaining thirteen books of the *Metaphysics* as transmitted in the extant *Corpus*. At the end of Book 1(A), Aristotle exhorts his reader to return to and go through the puzzles concerning 'the same things' (τῶν αὐτῶν) (*Met* 1.10: 993a 25-27). Whilst the referent of τῶν αὐτῶν is unclear, Aristotle's insistences that we proceed by engaging in puzzles is suggestive of a connection between his account of theoretical wisdom in Book 1 and the puzzles of Book 3(B) (Cooper 2012: 351-354, Reeve 2016: 307). I treat this as sufficient reason to suppose that Book 1 is part of the same project as Book 3(B), which in turn structures the main discussions of being *qua* being, i.e. Books 5(Γ), 7(Z), 8(H), and 9(Θ) (see also Shields 2012). Admittedly, *Metaphysics* 12(Λ) reads as a standalone treatise and, despite being transmitted as Book 12 of the *Metaphysics*, may not have been intended as such (Frede 2000a: 1-5). Nonetheless, *Metaphysics* 12 clearly stands as a work of metaphysics (as Aristotle understands it), evidenced by the fact that it traverses some of the same ground as *Metaphysics* 7-9 (Frede 2000b: 53) and is introduced as a study of substance and an inquiry into the first principles and causes of substances (*Met* 12.1: 1069a18-19, see also Judson 2018). We may reasonably assume, then, that *Metaphysics* 12 offers an inquiry that can be read as part (or perhaps an instance) of Aristotle's inquiry into theoretical wisdom, as described in *Metaphysics* 1. On this view, Aristotle's investigation into the first principles and causes of substance in *Metaphysics* 12 (which include the PM as an immovable substance and divine first principle) should be understood as embraced by Aristotle's description of σοφία in *Metaphysics* 1 as knowledge of (primary) first principles and (first) causes.

wisdom, such that the PM adds value to theoretical wisdom as one of its proper objects.

Aristotle's account of the PM in *Metaphysics* 12 is intended to explain the eternal circular motion of the primary heaven (12.7: 1072a21-23) and, in turn, the eternity of motion *tout court* (12.6: 1071b5-11).[295] The PM, then, is a cause in so far as it is the cause of the eternal motion of the primary heaven and thus a principle upon which the heaven and whole of nature depend (12.7: 1072b13-14).[296] Aristotle argues that the PM moves the primary heaven without itself being moved (12.7: 1072a24-27). In order to explain how the PM achieves this, Aristotle: (i) offers a schematic account of how objects of desire and objects of thought move without being moved (1072a26-b1); (ii) explains the sense in which final causes exist among unmoved movers, i.e. as something aimed at but not as something benefitted (1072b1-3);[297] and (iii) appears to claim that the PM produces movement in so far as it is loved (1072b3-4). On this basis, there is a traditional interpretation of the PM in the *Metaphysics* as a final cause of the motions of the primary heaven, according to which the primary heaven moves eternally in a circle for the sake of the PM, perhaps as an act of imitation or approximation.[298] On this view, the PM is a final cause in so far as it (and so its activity) is aimed at by the primary heaven, but the PM is not itself a beneficiary of the primary heaven's circular motion (12.7: 1072b1-4).

However, the traditional interpretation has recently been challenged, with a number of commentators maintaining instead that either (i) the PM causes motion as the soul of the primary heaven, (ii) the PM acts solely as an efficient cause, or (iii)

---

[295] See also *Met* 12.6: 1071b25 *ff.*, 12.7: 1072a19-21.

[296] ἐκ τοιαύτης ἄρα ἀρχῆς ἤρτηται ὁ οὐρανὸς καὶ ἡ φύσις.

[297] See also *Phys* 2.2: 194a35-36, *DA* 2.4: 415b2-3, 20-21, *EE* 8.8: 1249b15, Kullman 1985, Johnson 2005: 69-71, Menn 2012: 460-462 n.40. Cf. Gelber 2018.

[298] The tradition perhaps goes as far back as Theophrastus (*Metaphysics*: 5a23-b10). For more contemporary examples, see: Ross 1924: cxxx-cxli, Elders 1972, Kahn 1985, Menn 1992, 2012, Richardson Lear 2004: 73-80, Ross 2016.

the PM acts as both a final and efficient cause.[299] Criticisms of the traditional interpretation include the fact that: (i) Aristotle's description of the PM suggests that it acts as an efficient cause;[300] (ii) Aristotle makes no mention of imitation or approximation in *Metaphysics* 12 – the mechanism by which the PM is supposed to cause the motion of the primary heaven as an object of love;[301] (iii) the PM's contemplative activity is not the final cause but an exemplary cause of the motion of the primary heaven, whose final cause is in fact to imitate the PM;[302] and (iv) that treating the PM as a final cause in this manner implies that the primary heaven is capable of thinking and desiring.[303],[304] Picking up on this final concern, David Charles also argues that Aristotle's description of the PM as a final cause is intended as no more than 'a reasonable account'. On this view, Aristotle is not committed to the thought that the PM acts as a final cause, but presents it as such in order 'to make it intelligible that nature can depend on a first unmoved mover' (Charles 2012: 251). If Aristotle were committed to his account of the PM as a final cause, he would have provided details of how it is good for the primary heaven, given its particular nature, to act as it does for the sake of the PM. But Aristotle provides no such details.[305] Thus the traditional view is either mistaken or should not be treated as something Aristotle wholeheartedly endorses.

---

[299] For (i): Berti 2000, 2012; for (ii): Broadie 1993, Kosman 1994; for (iii): Bradshaw 2001. Cf. Judson 1994. Concerns about the PM's mode of causation go back at least as far as Simplicius (*On Aristotle's Physics*: 1360.24-31)

[300] Berti 2000: 186, Bradshaw 2001: 7-8.

[301] Broadie 1993: 379, Berti 2000: 200-206, 2012: 863-868. The traditional interpretation presumably draw resources from other passages in which Aristotle describes causation in terms of one thing imitating or partaking in a property of another, e.g. *GC* 2.10: 337a1-7, *DA* 2.4: 415a25-b7, *GA* 2.1: 731b24-732a3, *Met* 9.8: 1050b28-29, cf. Plato *Symposium* 207c-208b.

[302] Broadie 1993: 382, Berti 2000: 187-201.

[303] Bradshaw 2001: 8.

[304] For a summary of additional criticisms, see Ross 2016: 211-215.

[305] This is in stark contrast with Aristotle's teleological explanation of animal and plant reproduction, which occurs for the sake of animals and plants being able to partake in (in some sense) the eternal and the divine (*DA* 2.4: 415a26-b7, *GA* 2.1: 731b24-732a3, Charles 2012: 248-249).

I will not here provide a defence of the traditional interpretation of the PM's mode of causation – indeed, defending either the traditional or an alternative interpretation is beyond the scope of this thesis. I argue instead that *if* Aristotle considered the PM to be a final cause of the motion of the primary heaven, we are provided with a good explanation of how the PM as an object theoretical wisdom imparts value on theoretical wisdom. As it happens, I do not think that my interpretation depends upon the PM being a final cause, nor on Aristotle being committed to the thought that the PM is a final cause (I'll return to this thought below). Nonetheless, the notion of final causality provides a helpful foil with which to understand how the PM as an object of knowledge imparts value on theoretical wisdom. My argument runs as follows:

(1) The PM is a proper object of theoretical wisdom *qua* final cause;

(2) To know (in the fullest sense) the PM *qua* final cause requires that one judges the PM to be a genuine instance of goodness;

(3) Judging the PM to be a genuine instance of goodness imparts value on knowledge of the PM as a final cause;

(4) Therefore: Theoretical wisdom is valuable in virtue of the PM as one of its proper objects.

In line with the traditional interpretation of *Metaphysics* 12, I assume premise (1). I argue for premises (2) and (3) in what follows.

7.3.2.1. Arguing for premise (2)

I offer two points in support of premise (2). First, that goodness is part of the content of teleological causes as objects of knowledge and, second, that teleological causes are genuine instances of goodness.

That goodness is part of the content of teleological causes can be straightforwardly inferred from how Aristotle talks of teleological causes as objects of knowledge. Take, for example, Aristotle's remarks in *Physics* 2.3:

T7.7   […] and [there are also] the [causes] as the goal and the good of the other things; for, that for the sake of which tends to be the best and the goal of the other things […] (*Phys* 2.3: 195a21-25)[306],[307]

[…] τὰ δ' ὡς τὸ τέλος καὶ τἀγαθὸν τῶν ἄλλων· τὸ γὰρ οὗ ἕνεκα βέλτιστον καὶ τέλος τῶν ἄλλων ἐθέλει εἶναι […]

And, similarly, in *Physics* 2.7:

T7.8   Therefore, since nature is for the sake of something, this [cause] must also be known, and the reason why is to be demonstrated in every way, e.g. [i] that, from this, necessarily that (and "from this" either without qualification or for the most part), and [ii] if this will be, then that will be (just as the conclusion is from the premises), and [iii] that this was what it was to be something, and [iv] because it is better thus – not without qualification but in relation to the being of each thing. (*Phys* 2.7: 198b4-9)

ὥστε ἐπεὶ ἡ φύσις ἕνεκά του, καὶ ταύτην εἰδέναι δεῖ, καὶ πάντως ἀποδοτέον τὸ διὰ τί, οἷον ὅτι ἐκ τοῦδε ἀνάγκη τόδε (τὸ δὲ ἐκ τοῦδε ἢ ἁπλῶς ἢ ὡς ἐπὶ τὸ πολύ), καὶ εἰ μέλλει τοδὶ ἔσεσθαι (ὥσπερ ἐκ τῶν προτάσεων τὸ συμπέρασμα), καὶ ὅτι τοῦτ' ἦν τὸ τί ἦν εἶναι, καὶ διότι βέλτιον οὕτως, οὐχ ἁπλῶς, ἀλλὰ τὸ πρὸς τὴν ἑκάστου οὐσίαν.

In both texts, Aristotle is clear that the final cause is something good. And in [iv] of T7.8 he specifies the sense of this: the achievement of an individual's final cause is something good for the individual whose goal it is, given its nature. Hence Aristotle insists that we demonstrate the final cause 'because it is better thus' – not better without qualification but in relation to each thing's being.[308] So, for example, if a certain mode of living is the goal for a particular type of organism, then achieving

---

[306] Translations from the *Physics* following Hardie and Gaye in Barnes 1984.

[307] See also *Phys* 2.2: 194a33, 2.3: 194b32-195a3, 195a23-25, 2.7: 198a9, b8, *Insomn* 2: 455b17-18, *PA* 1.1: 639b14-21, *GA* 1.4: 717a16.

[308] See also *IA* 1: 704b10-12, 8: 708a9-12, *GA* 2.1: 731b24-732a3. For interpretations of T7.8 along these lines, see Charlton 1985: 149, Kullmann 1985: 173, Bodnár 2005: 24-25, Johnson 2005: 92-93, Judson 2005: 352-355, Charles 2012: 229-230.

that goal will be good for individuals of that type in virtue of their nature. Final causes do causal work, then, because their achievement is good for the individual who aims at it (where this includes not just humans but also non-human animals and plants). In all such cases, the goods in question are either necessary for living or beneficial for living well (e.g. *DA* 2.4: 415b7-31, 3.13: 435b20-21).[309] As such, in order to know a final cause, one must know that (and the sense in which) the final cause is something good for the individual who aims at it: to fail to do so would be to fail to know it (in the fullest sense) as a final cause, i.e. to fail to demonstrate that 'it is better thus'.[310] Similarly, then, to know that the primary heaven moves for the sake of the PM but to fail to know that this is good for the primary heaven, is to fail to know the PM as a final cause of the primary heaven's motion.

When one knows a final cause, then, goodness is part of the content of one's knowledge. And, importantly, Aristotle considers these to be genuine cases of goodness. This much is clear from Aristotle's brief discussion of goodness in *Nicomachean Ethics* 1.6. Aristotle there argues against the Platonic thesis that the good is univocal, i.e. that the good is 'something common, universal, and one' (κοινόν τι καθόλου καὶ ἕν, 1096a28). Instead, Aristotle attempts to argue for the multivocality of goodness, according to which there is no single account of goodness that is common to all. In particular, Aristotle argues that goodness is

---

[309] See also Leunissen 2010: 57-63, 81-99.

[310] Gotthelf argues that Aristotle's axiological language should not be taken literally when describing final causes in natural science. Instead, talk of the good in Aristotle's biological works is merely a heuristic tool for identifying and communicating non-evaluative features of animals, such as their proper capacities and activities (Gotthelf 1988). However, as Johnson points out, this fails to take heed of the fact that final causes denote both that which is aimed at and the beneficiary (Johnson 2005: 91). So, for example, Aristotle describes the soul as a final cause (*DA* 2.4: 415b7-21), such that the body exists for the sake of the soul (as an aim) but also exist for the sake of the individual (as benefiary). It is good for the individual to have a body that ensures it can perform its goals or essential life functions. When Aristotle's speaks of final causes as good, then, he at least has in mind that the achievement of such goals is good for the individual whose goal it is. In this sense we should take Aristotle's axiological language literally.

multivocal because goodness is applied to all the categories of being, and being is multivocal across those categories:

T7.9   Further, since the good is said of things in as many ways as being – for, it is said in that of what it is (e.g. god and intellect), in that of quality (e.g. the virtues), in that of quantity (e.g. the moderate amount), in that of relation (e.g. the useful), in time (e.g. the opportune moment), in that of place (e.g. a dwelling), and in the other cases – thus it is clear that it [i.e. the good] cannot be something common, universal, and one; for, then it would not be said of things in all the categories, but only in one. (*EN* 1.6: 1096a23-29)

ἔτι δ' ἐπεὶ τἀγαθὸν ἰσαχῶς λέγεται τῷ ὄντι (καὶ γὰρ ἐν τῷ τί λέγεται, οἷον ὁ θεὸς καὶ ὁ νοῦς, καὶ ἐν τῷ ποιῷ αἱ ἀρεταί, καὶ ἐν τῷ ποσῷ τὸ μέτριον, καὶ ἐν τῷ πρός τι τὸ χρήσιμον, καὶ ἐν χρόνῳ καιρός, καὶ ἐν τόπῳ δίαιτα καὶ ἕτερα τοιαῦτα), δῆλον ὡς οὐκ ἂν εἴη κοινόν τι καθόλου καὶ ἕν· οὐ γὰρ ἂν ἐλέγετ' ἐν πάσαις ταῖς κατηγορίαις, ἀλλ' ἐν μιᾷ μόνῃ.

I won't here go into the details or Aristotle's argument.[311] What's important for my purposes is that Aristotle understands goodness to be multivocal, such that instances of final causation are also genuine instances of goodness. This is true even if different instances of goodness appear to be disparate, i.e. in virtue of the account of goodness being different in each case.[312] To know that x is the final cause of y, then, is to know that x is good for y, and that x's being good for y is a genuine instance of goodness. I take these considerations as sufficient for premise (2): to know the PM *qua* final cause requires that one knows that the primary heaven acts for the sake of the PM, that this is good for the primary heaven, and that one judges it to be a genuine case of goodness.[313]

---

[311] See Shields 1999: ch. 8, 2014.

[312] This is perhaps further supported by Aristotle's thought that the good and doing well of each thing is found in its function (*EN* 1.7: 1097b25-28). In this claim, Aristotle appears to treat the well-functioning of each thing as a genuine case of goodness relative to each kind of thing. See MacDonald 1989.

[313] See also Baker 2017.

7.3.2.2. Arguing for premise (3)

But why should we think that judging the PM's final causality to be a genuine instance of goodness imparts value on knowledge of the PM (premise 3)? After all, I could very plausibly judge and know that reproduction is good for an animal species (and that this is genuinely good for the species in question) in a manner that adds no value to my knowledge that it is good.[314] This is because my knowing that reproduction is good for an animal species need not have any bearing on what's good for me, and so need not be good for me to know. However, the manner in which Aristotle describes the PM suggests that knowing the PM as a final cause demands more than knowing that acting for the sake of the PM is good for the primary heavens; in addition, we must ourselves evaluate the PM as superlatively good.

To see this, it's first worth noting that Aristotle considers the PM to be 'the best substance' (ἡ ἀρίστη οὐσία 12.9: 1072b28), that its proper activity is 'life that is best and eternal' (ζωὴ ἀρίστη καὶ ἀίδιος, 12.7: 1072b28, cf. b11), and that it is superlatively good in virtue of its contemplative activity (12.9: 1074b21-22, b33-35). This is particularly significant for understanding the PM as a final cause: the PM causes the motion of the primary heaven in virtue of its activity (12.7: 1073a15) and the primary heaven is itself divine, so it could only plausibly desire or be inspired by something that is better than it. And Aristotle illustrates the superlative goodness of the PM by making clear that humans are part of the same axiological framework as the PM. For example, immediately after he concludes that the PM is 'the sort of first principle upon which the heavens and nature depend' (1072b13-14),[315] Aristotle explains that the PM's 'way of life is like the best we [can achieve] for a short time' (1072b14-15).[316] The contemplative, intellectual activity of Aristotle's PM is then further described as superlatively pleasant and best (1072b24, b26-30). And it is, from our perspective, wondrous – all the more so because the PM engages in this

---

[314] *DA* 2.4: 415a26-b7, *GA* 2.1: 731b24-732a3. Cf. Henry 2015b.

[315] ἐκ τοιαύτης ἄρα ἀρχῆς ἤρτηται ὁ οὐρανὸς καὶ ἡ φύσις

[316] διαγωγὴ δ᾿ ἐστὶν οἵα ἡ ἀρίστη μικρὸν χρόνον ἡμῖν

activity to a greater degree than we can (1072b24-26). Aristotle thus argues for the superlative goodness of the PM by situating its goodness in relation to a human good, i.e. theoretical contemplation. As such, the PM is good in a sense that is not insulated and distinct from human goods; rather, it engages in a superlative version of an activity that humans are able to engage in (albeit less and to a lesser degree) and that also has genuine value for humans. As a consequence, to fail to evaluate the PM as good is to fail to know (in the fullest sense) its nature and activity, because the PM's activity is a superlative version of and thus bears direct relation to the human good of theoretical contemplation. When one fails to evaluate the PM as superlatively good, one has failed to understand something about its activity, i.e. its superlative goodness, understood in relation to the human good of theoretical contemplation. In so doing, one also fails to know (in the fullest sense) the PM as a final cause, because it acts as a final cause in virtue of the superlative nature of its activity.

Aristotle may therefore argue for premise (3) as follows:

(1) The PM causes the motion of the primary heaven in virtue of its contemplative activity;

(2) That the PM's contemplative activity is the best activity is part of the explanation of how the PM causes the motion of the primary heaven;

(3) Therefore: To know (in the fullest sense) that the PM causes the motion of the primary heaven in virtue of its contemplative activity requires knowing that its activity is the best activity;

(4) To know (in the fullest sense) that the PM's activity is the best activity requires evaluating it as good, because the PM's activity is a superlative version of the human good of theoretical contemplation. To fail to do so would be to fail to know (in the fullest sense) the nature of the PM's activity;

(5) Therefore: To know (in the fullest sense) that the PM causes the motion of the primary heaven requires evaluating the PM as good.

Someone who claims that knowing the PM as a final cause is not good to know because it bears no relation to the human good, has thus failed to understand the goodness of the PM. If they had understood the fact that the PM causes the motion of the primary heaven by engaging in theoretical contemplation (both always and to a greater degree than us) then they would have known this as something wondrous (θαυμαστός, 12.7: 1072b24-26). And this state of wonder makes the PM something good to know. (I'll return to the theme of wonder in the following example.)

In sum, I've argued that knowing (in the fullest sense) the PM as a final cause of the eternal motion of the heavenly sphere demands that one evaluates the PM as good. On this view, if someone knows the PM as a final cause but fails to evaluate it as good, then they are not theoretically wise in respect of the PM – there is more for them to know about the PM, i.e. its goodness. The PM thus adds value to theoretical wisdom as a proper object of theoretical wisdom.

Before turning to the second example, it's worth making two points in respect of the traditional interpretation of the PM. I previously claimed that it should not matter for my argument if the PM is not a *final* cause. I've employed the traditional interpretation of the PM because it provides a useful foil for explicating the Good Objects Principle in the case of the PM: if the PM is an object of theoretical wisdom as a final cause, then goodness will necessarily figure in the content of our knowledge of the PM's causal power. If however, it's Aristotle's view that the PM causes the motion of the primary heaven as an efficient cause, or as the soul of the primary heaven, or as an efficient and final cause, it is nonetheless the case that Aristotle describes the PM's activity as superlatively good and, plausibly, that grasping the superlative status of the PM's activity is essential to knowing its role as a cause and first principle (whatever its modality). This is because, whatever it's causal modality, the PM causes motion in virtue of its superlative activity, such that knowing (in the fullest sense) the PM's causality will require grasping the superlative nature of its causal activity. In this sense, my argument should not fall together with the traditional interpretation of the PM. In addition, I claimed that it should not matter for my argument if Aristotle was only committed to the PM's final causality as a reasonable account. This is because, as Charles puts it, the PM is

nonetheless intended 'to make it *intelligible* that nature can depend on a first unmoved mover' (my emphasis). When Aristotle invokes reasonable accounts in other contexts, they are nonetheless intended as accounts that (in some sense) do explanatory work and thus put us in a better epistemic position. For example, in *On the Heavens* 2.12 Aristotle provides a reasonable teleological account in order to ensure that the puzzles at hand neither seem absurd (ἄλογος, 292a17-18) nor are entirely inexplicable (παράλογον, 292a21-22).[317] So even if Aristotle is not committed to the thought that the PM acts as a final cause, he nonetheless proposes it as a candidate explanation and thus a candidate object of knowledge. Consequently, to understand (as best we can) the PM as a final cause still demands that we grasp the PM's activity as good and (as best we can) the sense in which it is good for the primary heaven to act for the sake of the PM.

7.3.3. *Knowing the final causes of animals*

In this section, I consider Aristotle's exhortation to the study of animals in *Parts of Animals* 1.5. Aristotle there argues that the philosophical study of animals is valuable because it grasps the causes of animals and, in particular, teleological causes. When we know an animal in relation to its final cause, we glimpse something of the divine in nature. I argue that this passage further supports and explicates the thought that value is imparted on wisdom by its divine proper objects. Similarly to the case of theoretical wisdom in the *Metaphysics*, a philosophical understanding of the parts of animals is also an evaluative epistemic state. In order to know (in the fullest sense) the teleological causes of the parts of animals, it is necessary to evaluate them as genuine instances as goodness. As a consequence, Aristotle similarly proposes that there is wonder to be found in the study of animals, just as there is wonder to be felt in understanding the Prime Mover.

    Parts of Animals 1.5 opens by distinguishing between two types of beings: eternal beings that are ungenerated and imperishable, and beings subject to

---

[317] See also Leunissen 2010: 152-157, 165-168, Charles 2012: 247 *ff*.

generation and destruction (644b22-24). The former are most readily understood to include the heavenly or astronomical bodies, such as the planets and stars, whereas the latter include terrestrial beings, including animals and plants. Aristotle claims that the study of eternal beings is both estimable and divine (τιμίας καὶ θείας), but we have limited epistemic access to them due to the paucity of perceptual data (644b24-28). On the other hand, we have better epistemic access to (and so know more about) perishable plants and animals because we live among them (644b28-29). Aristotle argues that each study has its own charm (χάριν) (644b31). On the one hand, the little knowledge that we do have of eternal beings is more pleasurable because of its esteem (διὰ τὴν τιμιότητα, 644b32-33: 'just as to catch sight of a chance, brief glimpse of those [we] love is more pleasant than to see exactly many other and great things' (644b33-35).[318] On the other hand, our knowledge of the animals and plants that surround us is superior because we know more about them and know them more fully (645a1-4). Consequently, even if knowing the estimable and divine eternal beings provides greater pleasures, there is much more we can know about the animals and plants around us.

Aristotle then urges his reader 'to speak about animal nature, omitting nothing in our power, whether of lesser or greater esteem' (645a5-8).[319] But why ought we omit nothing? Whilst it might be the case that knowledge of animals has value because we are able to know them more fully and with greater exactitude, it doesn't follow that we should go about knowing everything that we can about animals. Why not, rather, put the majority of our efforts into acquiring the better, more estimable, knowledge of eternal beings? What is it about the study of animals that is deserving of our attention? Aristotle's answer is as follows:

T7.10 For, even in the study of animals disagreeable to perception, the nature that wrought them likewise provides extraordinary pleasures to those who are able to know their causes and are by nature lovers of wisdom. For, it also

---

[318] ὥσπερ καὶ τῶν ἐρωμένων τὸ τυχὸν καὶ μικρὸν μόριον κατιδεῖν ἥδιόν ἐστιν ἢ πολλὰ ἕτερα καὶ μεγάλα δι' ἀκριβείας ἰδεῖν

[319] περὶ τῆς ζωϊκῆς φύσεως εἰπεῖν, μηδὲν παραλιπόντας εἰς δύναμιν μήτε ἀτιμότερον μήτε τιμιώτερον

would be unreasonable, even absurd, if we enjoyed studying likenesses of them – because we are at the same time studying the craft, such as painting or sculpture, that wrought them – whilst not loving even more the study of things constituted by nature, at least when we can behold their causes. (*PA* 1.5: 645a7-15)[320]

Καὶ γὰρ ἐν τοῖς μὴ κεχαρισμένοις αὐτῶν πρὸς τὴν αἴσθησιν κατὰ τὴν θεωρίαν ὅμως ἡ δημιουργήσασα φύσις ἀμηχάνους ἡδονὰς παρέχει τοῖς δυναμένοις τὰς αἰτίας γνωρίζειν καὶ φύσει φιλοσόφοις. Καὶ γὰρ ἂν εἴη παράλογον καὶ ἄτοπον, εἰ τὰς μὲν εἰκόνας αὐτῶν θεωροῦντες χαίρομεν ὅτι τὴν δημιουργήσασαν τέχνην συνθεωροῦμεν, οἷον τὴν γραφικὴν ἢ τὴν πλαστικήν, αὐτῶν δὲ τῶν φύσει συνεστώτων μὴ μᾶλλον ἀγαπῶμεν τὴν θεωρίαν, δυνάμενοί γε τὰς αἰτίας καθορᾶν.

Just as in the case of the study of the heavenly bodies, there is great pleasure to be had in the study of animals.[321] Aristotle here claims that grasping the causes of animals has a transformative effect: animals that are disagreeable to perceive become delightful and pleasant to know.[322] This is likened to the observation of images or likenesses, which we enjoy not only in virtue of the image itself but also by considering the craft that produced them.[323] But what, exactly, do we behold such that knowing the causes of animals is pleasant? Aristotle elaborates that:

T7.11 For this reason, we should not be childishly disgusted at the examination of the less estimable animals. For, in every natural thing there is something wondrous; and just as Heraclitus is said to have spoken to those strangers who wished to meet him, but stopped as they were approaching when they saw him warming himself by the oven – he bade them enter without fear, "for there are gods here too" – in this manner one should approach inquiry about each of the animals without disgust, since in every one there is something natural and fine. For, what is not chancy but rather for the sake of

---

[320] Translations from the *Parts of Animals* follow Lennox 2001a.

[321] See also *EN* 10.7: 1177a25.

[322] See also Nightingale 2004: 263-265, Warren 2014: 71-77.

[323] Although Aristotle here suggests that this is contingent on being a lover of wisdom by nature, he elsewhere suggests that everyone takes pleasure in learning through images and likenesses – not just wisdom lovers (*Poet* 4: 1448b9-19). Everyone delights in images (even images of things it would be distressing to see in the flesh) because we learn something by considering them.

something is [present] most of all in the works of nature; and the end for the sake of which it has been organised or has come to be, occupies the place of the fine. (*PA* 1.5: 645a15-26)

Διὸ δεῖ μὴ δυσχεραίνειν παιδικῶς τὴν περὶ τῶν ἀτιμοτέρων ζῴων ἐπίσκεψιν. Ἐν πᾶσι γὰρ τοῖς φυσικοῖς ἔνεστί τι θαυμαστόν· καὶ καθάπερ Ἡράκλειτος λέγεται πρὸς τοὺς ξένους εἰπεῖν τοὺς βουλομένους ἐντυχεῖν αὐτῷ, οἳ ἐπειδὴ προσιόντες εἶδον αὐτὸν θερόμενον πρὸς τῷ ἰπνῷ ἔστησαν (ἐκέλευε γὰρ αὐτοὺς εἰσιέναι θαρροῦντας· εἶναι γὰρ καὶ ἐνταῦθα θεούς), οὕτω καὶ πρὸς τὴν ζήτησιν περὶ ἑκάστου τῶν ζῴων προσιέναι δεῖ μὴ δυσωπούμενον ὡς ἐν ἅπασιν ὄντος τινὸς φυσικοῦ καὶ καλοῦ. Τὸ γὰρ μὴ τυχόντως ἀλλ' ἕνεκά τινος ἐν τοῖς τῆς φύσεως ἔργοις ἐστὶ καὶ μάλιστα· οὗ δ' ἕνεκα συνέστηκεν ἢ γέγονε τέλους, τὴν τοῦ καλοῦ χώραν εἴληφεν.

There is something wondrous in every natural thing, even the least estimable of animals. Aristotle directs our attention to the final causes of animals, in particular the goal for the sake of which each animal has either been put together (e.g. as manifested in the structure and arrangement of an animal's parts for the sake of its function) or has come to be (e.g. as manifested in its growth and development towards its formal, final cause). This includes studying both (i) the parts of animals that are essential for the good of each animal *qua* living and being the type of animal that it essentially is and (ii) the parts of animals that are directed towards the good of each animal *qua* being better off and living well (*PA* 1.1: 640a33-b4).[324] Consequently, knowing the final causes of animals transform the lower animals into something pleasant and wondrous to know. This, crucially, involves knowing the good of each animal, which Aristotle here describes as both natural and fine.[325]

Aristotle might, then, argue as follows:

(1) Philosophical knowledge of animals requires knowing the final causes of animals;

---

[324] Leunissen 2010: ch. 3. See also *PA* 1.1: 639b14-21, 640a33-b4, 641a23-32, 641b23-26, 642a31-b4, 1.5: 645b14-22.

[325] See also *PA* 3.1: 661b7, 3.3: 664b33, *Poet* 7: 1450b21-34, 9: 1452a4-11.

(2) Knowing the final causes of animals requires knowing how the parts of each animal are for the sake of the good of each animal;

(3) Knowing how the parts of each animals are for the sake of the good of each animal imparts value on knowledge of the final causes of animals;

(4) Therefore: Philosophical knowledge of animals is valuable in virtue of its objects.

(5) Therefore: We have reason to seek philosophical knowledge of animals.

Suppose that we agree with Aristotle about premises (1) and (2), we may nonetheless object to (3): knowing how the parts of each animal are for the sake of the good of each animal does not impart value on that knowledge, because knowing the good of each animal merely requires knowing what's good for that animal. There is nothing good for me (as a knower or otherwise) about knowing what the good of another animal is. Aristotle argues, however, that knowing the final causes of animals is valuable because it inspires wonder and is pleasant.[326] How might he defend this thought?

Aristotle's Heraclitean anecdote and, in particular, the invocation for his visitors to enter without trepidation, 'for there are gods here too', should have us thinking back to Aristotle's initial division between the eternal heavenly bodies and the perishable animals. Aristotle there argues that studying and knowing about the heavenly bodies is estimable and divine, and also pleasant in virtue of its esteem. We might reasonably suppose that Aristotle is again relying upon the Good Objects Principle: knowledge of the heavenly bodies is in part estimable and divine because of the estimable and divine nature of the objects themselves. If that's so, then we might suppose that the sense in which 'there are gods here too' in the case of the study of animals, is that the study of animals is also in some sense divine in virtue of its objects. And Aristotle makes clear that the divine is found in the study of animals in the examination of the final causes of animals, i.e. the good of each animal, which 'occupies the place of the fine'. If so, then Aristotle argues as follows:

---

[326] See also *Rhet* 1.1: 1371a31-35, b4-10.

studying the heavenly bodies is divine, estimable, and pleasurable because of the divine and estimable nature of eternal beings. Aristotle assumes this much is obvious to his reader: eternal beings are clearly good to know. But there is also something divine to be known in the case of animals, i.e. their final causes. In virtue of this commonality, knowledge of the final causes of animals is also a source pleasure and wonder, and thus good to know.[327]

Aristotle thus argues that knowing the final causes of each animal is divine, and it is divine because knowing the final causes of animals is to grasp the fact that nature is such that animals are structured and come into being for the sake of their good. And that nature (or the nature of animals) is such as to be good for each animal is a wondrous and pleasant thing to know. Aristotle's comparison with observing likenesses produced by craft is significant here: when we study a statue we do not merely consider it as an image or representation, but also as the product of craft.[328] And craft is itself aimed at the production of a good product, such that when we marvel at the product of craft we wonder at the craftsperson's goal-directed skill manifest in the good product. Similarly, then, when we come to know

---

[327] Pavel Gregoric offers an interpretation of the Heraclitean saying that is in broad agreement with my reading of *Parts of Animals* 1.5 (Gregoric 2001). On Gregoric's view, the visitors arrive to Heraclitus' household to find him warming himself by the fire in the kitchen. The visitors' hesitation to enter and join him is explained by the thought that the kitchen was a part of the house that guests typically were not given access to; rather, they expected to be welcomed in the main room of the house, where the hearth was traditionally located. Seeing his visitors' nervousness, Heraclitus beckons them in by pointing at the fire in the oven, with the thought that they would be treated just as hospitably by the fire in the kitchen as they would have been by the hearth in the main room. If this is correct, then Heraclitus attempts to convince his visitors that the kitchen – a place they would not otherwise enter – is as warming and hospitable as the principle fire in the household. And he captures this with the thought that the kitchen fire is also divine, just as the fire of the hearth is (thus invoking the Heraclitean relationship between fire and the divine). Similarly, I am suggesting that Aristotle invokes his reader to study the animals not merely because we can know more about them, but because the study of animals has something in common with the study of eternal beings: in both cases there is something divine to be known and, as a consequence, there is pleasure and wonderment to be found in both studies (even if there is greater pleasure to be had in the case of the eternal, heavenly beings).

[328] Cf. *Poet* 4: 1448b9-19.

the goal-directedness of the parts of animals in relation to their final causes, i.e. what's good for the animal, we ought to take delight and find wonder in the fact that nature is such that the parts of animals are directed towards the good for each animal (i.e. both their living and living well). This is perhaps suggested by Aristotle's invocation of the fine in T7.11. In so doing, Aristotle makes clear that there are fine things (and so fine things to know) outside of the sphere of human action. Just as the virtuous agent is first and foremost concerned with performing actions that are fine, Aristotle's natural philosopher is here described as concerned with the fine in nature. For the natural philosopher, that for the sake of which 'occupies the place of the fine', just as the fine is that for the sake of which the virtuous person acts.[329] In so doing, Aristotle makes clear that the fine is not only to be found in the sphere of human, practicable goods: when we behold the good of each animal, we also behold something fine and worthy of regard.[330]

On this view, the very fact that goodness is manifest outside of the sphere of practicable human goods is itself a wonderful and marvellous thing, and thus a wonderful and marvellous thing to know. Aristotle thus turns the sceptic's objection around. On coming to know that the parts of a certain animal are such that they are for the sake of the animal's good, the sceptic asks: "How is this knowledge useful or beneficial for me?". On Aristotle's view, this question is a sign that the sceptic has failed to appreciate the very fact that nature is so arranged such that there are genuine cases of goodness outside of the sphere of the practicable human good. And this in turn betrays a lacks of understanding on the sceptic's part: they've failed to grasp the good in nature as genuine cases of goodness. If the sceptic were to have grasped these as genuine cases of goodness, then they would not need to ask how such knowledge is useful or beneficial to them. For they would have found it wonderful and pleasant to know.

---

[329] *EN* 3.6: 1115b12-13, 23, 3.7: 1116a11-15, b3, 3.8: 1116b31, 1117a8, b9, 1120a23-24, 1122b6-7, 4.2: 1123a24-26, 9.8: 1168a33-34, *EE* 3.1: 1230a27-29, 8.15: 1248b36-37.

[330] On the relationship between teleology and the fine, see Richardson Lear 2004: 126-130, Irwin 2010: 386-389. Cf. *Met* 13.3: 1078a31-37.

Notably, Aristotle presents a similar line of response to those who challenge the value of philosophical knowledge in the *Protrepticus* (Ross F.12). There, (Aristotle's character of) Aristotle addresses a complaint of Isocrates' to the effect that philosophical knowledge is of no use or benefit to us. Aristotle argues that this complaint is based in part upon a failure to be able to distinguish that which is necessary and useful (e.g. without which living is impossible) from that which is itself good. Things which are good in themselves are good in the strict sense because other things are instrumentally valuable in virtue of them, i.e. they are a source of value. Because the Isocratean is unable to make this distinction, they ask of everything that is put before them, "What's the use or benefit of that?", and so fail to realise that certain things have final value, i.e. that they are good in themselves. Aristotle thus argues that one should not infer that philosophical knowledge has no value because it is neither useful nor beneficial. Rather, it has value as the observation of a spectacle has value:

T7.12   It is not a terrible thing at all, then, if it [i.e. philosophical knowledge] does not seem to be useful or beneficial; for, we don't claim that it is beneficial but that it is in itself good, and it is appropriate to choose it for itself, not because of some other thing. For, just as we travel abroad to Olympia for the sake of the spectacle itself, even if there is going to be nothing more to get from it (for the observing itself is superior to lots of money), and as we observe the Dionysia not in order to acquire anything from the actors (rather than actually spending), and as there are many other spectacles we would choose instead of lots of money, so too the observation of the universe should be honoured above everything that is thought to be useful. For, surely one should not travel with great effort for the sake of beholding people imitating women and slaves, or fighting and running, and not think one should behold the nature of existing things and the truth, for free. (*Protrepticus*: Ross F.12)[331]

 οὐδὲν οὖν δεινόν, ἂν μὴ φαίνηται χρησίμη οὖσα μηδ' ὠφέλιμος· οὐ γὰρ ὠφέλιμον ἀλλ' ἀγαθὴν αὐτὴν εἶναί φαμεν, οὐδὲ δι' ἕτερον ἀλλὰ δι' ἑαυτὴν αἱρεῖσθαι αὐτὴν προσήκει. ὥσπερ γὰρ εἰς Ὀλυμπίαν αὐτῆς ἕνεκα τῆς θέας ἀποδημοῦμεν, καὶ εἰ μηδὲν μέλλοι πλεῖον ἀπ' αὐτῆς ἔσεσθαι (αὐτὴ γὰρ ἡ θεωρία κρείττων πολλῶν ἐστι χρημάτων), καὶ τὰ Διονύσια δὲ θεωροῦμεν οὐχ ὡς ληψόμενοί τι παρὰ τῶν ὑποκριτῶν ἀλλὰ καὶ

---

[331] Translation following Hutchinson & Johnson 2017.

προςθέντες, πολλάς τε ἄλλας θέας ἑλοίμεθα <ἄν> ἀντὶ πολλῶν χρημάτων· οὕτω καὶ τὴν θεωρίαν τοῦ παντὸς προτιμητέον πάντων τῶν δοκούντων εἶναι χρησίμων. οὐ γὰρ δήπου ἐπὶ μὲν ἀνθρώπους μιμουμένους γύναια καὶ δούλους, τοὺς δὲ μαχομένους καὶ θέοντας, δεῖ πορεύεσθαι μετὰ πολλῆς σπουδῆς ἕνεκα τοῦ θεάσασθαι αὐτούς, τὴν δὲ τῶν ὄντων φύσιν καὶ τὴν ἀλήθειαν οὐκ οἴεσθαι δεῖν θεωρεῖν ἀμισθί.

Aristotle points to the fact that we do in fact value certain acts of observation for their own sake and not for what comes of them, e.g. seeing the Olympian and Dionysian spectacles. Given this, we should similarly value philosophical knowledge, in which one observes and contemplates the nature of existing things and the truth. And he does so by point of comparison: in the case of the Olympian and Dionysian spectacles, the things we observe are of lowly value, e.g. people running, fighting, and pretending to be women and slaves.[332] Although Aristotle is not explicit, his thought must be that philosophical knowledge is concerned with better objects (i.e. the nature of existing things and truth) such that we ought, if we consider spectacles to be valuable for their own sake, to also value philosophical contemplation for its own sake. It's not only free, but worthwhile because of the value of its proper objects.

So, Aristotle responds to the spectacle goer who fails to see the worth of contemplating truth and the nature of existing things by arguing that, since they ascribe final value to spectating lesser things, they should also ascribe final value to knowing and contemplating the nature of existing things and truth. And we might imagine that Aristotle would respond similarly to the person who is sceptical about studying animals and fails to grasp the worth of knowing and contemplating the good and the fine in nature, e.g. as manifested in the teleological causes of the parts of animals. Just as it is good to look upon and know the goodness manifest in the products of craft, there is pleasure and wonder to be had in knowing the goodness manifest in even the lesser animals. On the reading that I have presented, if indeed the sceptic fails to feel wonder and take pleasure in knowing the final causes of animals, this is indicative of the fact that they that they fail to know (in the fullest

---

[332] Aristotle's choice of examples is indicative of his chauvinism.

sense) those good objects as good. And, as I've argued, this betrays an epistemic failing: the sceptic fails to know (in the fullest sense) the teleological causes of animals as genuine instances of goodness.[333]

7.4. Conclusion

In both of the examples provided, Aristotle claims that the object of knowledge – either the PM's contemplative activity as a final cause of eternal motion, or the good of animals as the final cause of the structure and arrangement of their parts – is something wondrous and pleasant to know. I have argued that this is because our knowing them reveals genuine instances of goodness that fall outside of the sphere of practicable human goods. Such knowledge is thus valuable in virtue of its proper objects: when one knows them (in the fullest sense) one evaluates them as good and experiences wonder in response. On this view, theoretical wisdom (and philosophical knowledge more generally) is an evaluative epistemic state: its objects include that which is best, most estimable, divine, and wondrous, and to know them (in the fullest sense) involves evaluating them as such. In this sense, there is

---

[333] Andrea Nightingale argues that, on Aristotle's view, philosophical inquiry begins with wonder and ends in its absence (Nightingale 2004: 253-265). If the philosopher-inquirer loses the sense of wonder once found in their objects of their knowledge, then we might also suppose that those objects of knowledge are rendered valueless (*qua* object of knowledge) once the philosopher knows them. But this conclusion fails to disambiguate the aspect of wonder that finds surprise of puzzlement in an object of wonder, from the aspect that considers an object of wonder as marvellous, admirable, or wonderful (both the Greek "θαῦμα" and English "wonder"). Aristotle argues that philosophy must start with wonder and end with a lack of surprise or puzzlement (*Met* 1.2: 982b11-2, 983a11-21). However, this does not commit Aristotle to the claim that the philosopher should not continue to find the objects of their knowledge marvellous and wonderful to behold. Indeed, we might think that the continued sense of wonder (*qua* marvellous) is necessary for the philosopher to be motivated towards contemplation of what they know. For the sense of the marvellous, wonderful, or admirable, see: *Phys* 4.1: 208b34, *Meteor* 1.4: 342a5, *DA* 1.1: 402a3, *HA* 3.2: 511b30, *GA* 3.8: 758a3, 3.11: 761b15, *Met* 1.1: 981b14-15, 7.7: 1072b25, *EN* 5.1: 1129b29, 10.7: 1177a25, *Pol* 2.5: 1263b17, 8.6: 1341a11, *Poet* 18: 1456a20. For the sense of surprise or puzzlement, see: *Top* 4.5: 126b13 *ff.*, *GC* 2.6: 333a16, *HA* 6.36: 580b10, *GA* 3.9: 758b28, 4.4: 771a18, 26-27, *Met* 1.9: 993a1, 11.6: 1063a36, *EN* 7.7: 1150b8, *Rhet* :1.11 1371a28-b11, *Poet* 24: 1460a10-18.

an evaluative aspect of theoretical wisdom that is not detachable from the epistemic state of theoretical wisdom: one is not theoretically wise unless one evaluates the objects of theoretical wisdom as good and experiences them as good to know. This would betray an epistemic failing on the part of the knower.

This supplies additional content to the sense in which the theoretically wise person grasps theoretical truth well: in addition to grasping theoretical truth with virtuous motivations (as argued in Chapter 6), the theoretically wise person knows the proper objects of theoretical wisdom as good. And their knowledge of the goodness of the proper objects of wisdom imparts value upon their epistemic state: theoretical truths are good for the theoretically wise person to know. This, I have argued, is necessary for being theoretically wise in an epistemic sense. In order to be epistemically wise (i.e. to have the knowledge and understanding that is constitutive of wisdom) it is necessary that the wise person evaluates the objects of theoretical wisdom as good. Otherwise put: to fail to evaluate the objects of theoretical wisdom as good is an epistemic failure, such that if someone knows a proper object of theoretical wisdom, x, but fails to evaluate x as good, then they should not be said to be theoretically wise in respect of x – there is more for them to know about x, i.e. its goodness. In this sense, the theoretically wise person's good grasp of truth transforms the proper objects of theoretical wisdom into something good for the theoretically wise person to know. In virtue of knowing them wisely, the theoretically wise person experiences pleasure and wonder as a response to the goodness of the objects of their knowledge. In this sense, the theoretically wise person is necessarily a lover of wisdom.

In so doing, I have offered an explanation of Aristotle's Good Objects Principle, according to which value is imparted on a body of knowledge by its proper objects, such that its proper objects are a source of value for that knowledge. I initially argued that Aristotle relies on this principle through a consideration of his arguments in favour of identifying σοφία with theoretical wisdom in *Nicomachean Ethics* 6.7. There, Aristotle argues against the Proponent of Practical Wisdom, with the claim that theoretical wisdom is the best epistemic state because it is concerned with the best knowable objects. The Proponent, on the other hand, argues that

practical wisdom is the best epistemic state, because it is concerned with the practicable human good. Understanding theoretical wisdom as an evaluative epistemic state might be insufficient to convince the Proponent that theoretical wisdom is in fact better than practical wisdom, but it at least provides Aristotle with a meaningful sense in which value is imparted on theoretical wisdom by its proper objects. On this view, theoretical wisdom isn't valuable because it's intellectually demanding, but because the proper objects of theoretical wisdom are good. Similarly to the case of theoretically wise contemplation, Aristotle's explanation of the value of theoretical wisdom thus depends on two components. First, the proper objects of theoretical wisdom, which are the source of theoretical wisdom's value. Second, the theoretically wise person's virtuous epistemic state, in virtue of which the proper objects of theoretical wisdom are good and valuable for the theoretically wise person to know. In this sense, theoretical wisdom is valuable because only the theoretically wise person grasps theoretical truth well. This provides Aristotle with further response to Plato's hard value problem: a distinguishing feature of theoretical wisdom is that, in virtue of knowing and understanding (in the fullest sense) the proper objects of theoretical wisdom, the theoretically wise person finds value in theoretical truth. This knowledge and understanding (and thus its evaluative aspect) is something that a true opiner and the recent learner lack, such that theoretical wisdom has distinct value.

In conclusion, I present a summary of my account of the value of theoretical wisdom in the *Nicomachean Ethics* (Part II) and consider it in light of my interpretation of without qualification knowledge as an epistemic ideal in the *Posterior Analytics* (Part I). Finally, I reflect on my interpretation of Aristotle in relation to a number of contemporary virtue-theoretic accounts of the nature and value of knowledge.

The value of theoretical wisdom

Over the course of Part II of this thesis, I have provided an account of the value of the virtue of theoretical wisdom in the *Nicomachean Ethics*. On this view, theoretical wisdom is valuable because it is the virtue and thus best state of the knowledgeable part of the soul. And it is the virtue because it is the state in virtue of which we grasp theoretical truth *well*. I have argued that grasping theoretical truth well demands that the theoretically wise person fulfills analogues of all three of Aristotle's conditions for virtuous agency: they must grasp truth with knowledge and understanding (the epistemic condition), they must choose to grasp truth and choose it for its own sake (the motivational condition), and they must do so on the basis of a firm and unchanging epistemic state (the stability condition). The motivational condition is an expression of the theoretically wise person's love of wisdom, in virtue of which they ascribe final value to the proper objects and activities of theoretical wisdom. All three conditions are necessary to account for the value of theoretical wisdom.

Take, in the first case, the activity of theoretical contemplation. In order for one's contemplation to be an activity of complete or perfect happiness, it is not only necessary that (i) one contemplates the objects of theoretical wisdom with knowledge and understanding (the epistemic condition) and that (ii) one contemplates from a stable state of knowledge (the stability condition, required for contemplation to be sufficiently continuous). In addition, it is necessary that (iii) the

contemplator is a lover of wisdom, such that they choose contemplative activity for its own sake and take maximal pleasure in the activity of contemplation. Without this, they will not grasp theoretical truth *well*, such that their contemplative activity will not be an activity of complete or perfect happiness. In this sense, theoretical wisdom transforms the activity of theoretical contemplation into something superlatively good for the knower.

In the second case, I argued that theoretical wisdom also transforms the proper objects of theoretical wisdom into something good for the knower to know. On this view, theoretical wisdom is an evaluative epistemic state: in order to be theoretically wise, it is necessary that the wise person correctly judges the proper objects of theoretical wisdom to be genuine instances of goodness, and so evaluates them as such. Otherwise put, to fail to evaluate the objects of theoretical wisdom as good is an epistemic failure, such that if someone knows a proper object of theoretical wisdom, x, but fails to evaluate x as good, then they should not be said to be theoretically wise in respect of x – there is more for them to know about x, i.e. its goodness. In so far as they achieve this, the theoretically wise person again grasps truth *well*. Accordingly, the theoretically wise person is also a lover of wisdom in so far as they know and appreciate the goodness of the proper objects of theoretical wisdom.

On this view, theoretical truth is the sole bearer of theoretical epistemic value: it is both the goal and the doing-well of theoretical thought. And theoretical wisdom is the best epistemic state in respect of theoretical truth, because it is that in virtue of which a knower grasps theoretical truth well, i.e. such that their grasp of theoretical truth is good and valuable for them. Aristotle is thus well placed to answer Plato's value problem in respect of theoretical wisdom: theoretical wisdom stands the theoretically wise person in a particular relation to theoretical truth, such that they are able to grasp and contemplate theoretical truth in a manner that others cannot. And it is the theoretically wise person's particular way of grasping theoretical truth – with knowledge and understanding, a love of wisdom, and from a stable state – that gives value to the theoretically wise person's epistemic state. For

this reason, theoretical wisdom is the best state of the knowledgeable part of the soul.

Without qualification knowledge and theoretical wisdom

In Part I of this thesis, I argued that Aristotle's account of without qualification knowledge in the *Posterior Analytics* presents an epistemic ideal. This ideal has two aspects. The first is descriptive: to know without qualification is to be most knowing, i.e. to know objects that are most knowable and to know them in the most knowing way. The second is normative: without qualification knowledge is the best epistemic state, such that we have reason to strive to achieve it. On this view, Aristotle's epistemic project in the *Posterior Analytics* is an inquiry into the way we ought to know, if our knowing is to be superlatively valuable. How, then, does my account of the value of theoretical wisdom explain the value of Aristotle's epistemic ideal in the *Posterior Analytics*?

I've presented a straightforward answer: in order to be theoretically wise, it's necessary to know theoretical truths demonstratively, and for this it's necessary to know without qualification, i.e. one must have demonstrative knowledge (ἐπιστήμη) accompanied by non-demonstrative knowledge of the first principles of demonstrations (νοῦς). I argued that the value of Aristotle's epistemic ideal is to be grounded on the fact that knowledge is essentially a demonstrative state of the soul. And, as a constitutive part of theoretical wisdom, without qualification knowledge is a constitutive part of theoretical intellectual virtue, i.e. knowledge *qua* demonstrative state of the soul is necessary for the knowledgeable part of one's soul to be virtuous. On this view, without qualification knowledge is valuable – and so worth striving for – because without this it's not possible to be theoretically wise. The *Posterior Analytics* thus provides an account of certain necessary conditions for theoretical wisdom: to be theoretically wise requires grasping theoretical truth well, and this at least requires grasping theoretical truths demonstratively.[334]

---

[334] What, specifically, does demonstrative knowledge contribute to the value of theoretical wisdom? I offer two tentative answers. The first pertains to conviction. I

This returns us to the sophistic challenge to Aristotle's epistemic ideal. According to the sophistic knower, the sole value of any and all knowledge (or epistemic state) is instrumental on the value of making money through the appearance of wisdom. Given that it's typically unnecessary to either be theoretically wise or know without qualification in order to achieve this end, then we may have no reason to strive for Aristotle's superlative epistemic state. In response to the sophist's challenge, Aristotle isolates theoretical contemplation and the proper objects of theoretical wisdom as sources of value: theoretical contemplation performed wisely is an activity of complete or perfect happiness, and the proper objects of theoretical wisdom are superlatively good, such that they impart value on the theoretically wise person's epistemic state – they are good for them to know. As a constitutive part of the virtue of theoretical wisdom, Aristotle's epistemic ideal is thus necessary for accessing the goodness that the proper objects and activities of theoretical wisdom might afford. To this end, Aristotle's

---

argued that when we know by means of demonstration, we know an object of knowledge that affords maximal rational conviction and we know it with maximal rational conviction, i.e. we know necessary truths and we grasp the very reason why they could not be otherwise. This, plausibly, is necessary not only for knowing theoretical truths with knowledge and understanding, but also for one's knowledge to be maximally stable and steadfast. This, in turn, is necessary for one's contemplative activity to be an activity of complete happiness: without maximal stability, one's contemplation cannot be the most continuous activity. Consequently, demonstrative knowledge is necessary for the good of contemplation. The second pertains to the fact that, on Aristotle's view, all four types of causes are known by means of demonstrations, including final causes (*APo* 2.11: 94a20 *ff.*, *Met* 7.17: 1041a27-b9). Perhaps Aristotle has the resources to claim that we know final causes best when we know them by means of demonstration, and so we know the goodness of final causes best when we know them by means of demonstrations. Alternatively, perhaps the goodness of certain knowable objects (broadly construed) cannot be appreciated unless they are known by means of demonstration. To this end, we might understand demonstrative knowledge as a form of knowledge by acquaintance and invoke the exactitude of demonstrative knowledge: when we know by means of demonstration, we are best acquainted with that object because we know it with the exactitude that it affords. And when we know it with the exactitude it affords, we are best acquainted with its goodness. Work would have to be done, however, to show that we are best acquainted with *the goodness of* knowable objects only when we know them by means of demonstration. (On ἐπιστήμη as acquaintance knowledge, see Salmieri 2014: 6 *ff.*)

disagreement with the sophists about the value of knowing turns on a substantive disagreement about the nature of knowledge itself: the value of knowledge is to be found in the fact that knowledge is a very specific kind of having. In particular, knowledge is valuable because it is a virtuous state of the soul *qua* a constitutive part of theoretical wisdom, i.e. a state of the soul that transforms the proper objects and activities of theoretical wisdom into something good and valuable for the knower. Consequently, just as the sophistic way of knowing represents a way of going about knowing, conducting oneself as a knower, and evaluating the worth of different epistemic states, so does Aristotle's epistemic ideal: the possession of epistemic virtue is not merely the possession of knowledge and understanding, but a way of evaluating the proper objects knowledge and activities of knowing.

Virtue and the explanation of value

In response to Plato's value problem, a number of contemporary epistemologists employ concepts of virtue in order to explain the distinctive value of knowledge over mere true belief. These authors look to Aristotle in support of their views, to a greater or lesser degree. In this final section, I provide two examples of such virtue-theoretic accounts and argue that invoking virtue alone is insufficient to explain the value of knowledge. What these accounts lack is an explanation of virtue's source of value. I suggest that one lesson we might take from Aristotle's use of virtue is that virtue alone is insufficient to explain the value of knowing: virtue is merely that which transforms the good objects and activities of knowledge into something good and valuable for the knower. A full virtue-theoretic account of epistemic value must explain the source of virtue's value, such that its transformative nature is valuable (perhaps with recourse to the value of the proper objects and activities of knowing).

In the first instance, consider John Greco's account of knowledge, according to which knowledge is true belief due to the agent's good cognitive character. In particular, Greco argues that S knows that p only if S's true belief that p can be ascribed to and is caused by S's reliable (i.e. virtuous) cognitive character (Greco 2002: 123, 127-128). Citing *Nicomachean Ethics* 2.4, Greco first claims that virtuous

action done virtuously, as opposed to mere virtuous action, 'is both intrinsically valuable and constitutive of the good life'. Similarly, truths that are believed virtuously on account of one's virtuous cognitive character are of greater value than truths merely believed: 'as in the case regarding moral goods, getting the truth as a result of one's virtues is more valuable than getting it on the cheap' (*ibid.* 134).[335] Because knowledge is a manifestation of epistemic virtue, whereas mere true belief is not, Greco claims that we can thus explain the distinctive value of knowledge.[336]

Along similar lines, Linda Zagzebski argues that knowledge is an act of intellectual virtue, also invoking Aristotle: 'Aristotle thought that moral and intellectual virtues are constituents of *eudaimonia*, and since *eudaimonia* is an active state, it includes components of morally and intellectually virtuous acts' (Zagzebski 2002: 141).[337] One such intellectual act is believing truly, the virtuous performance of which requires that the agent is 'motivated by the motivational component of intellectual virtue', i.e. a love of truth as such (*ibid.* 152, cf. 146-150). Zagzebski argues that we ought to conceptualise belief primarily as an act rather than a state of affairs that results from acts. A good state of affairs cannot plausibly be made better if it is brought about by a good motive: a good state of affairs brought about by chance is just as a good state of affairs brought into being by a good motive. But, Zagzebski claims, this is not true of acts: an act performed with good motive is better than one performed without. This is in part because states of affairs are distinct from the motives and acts that produce them, but in the case of acts (generally) and acts of belief (in particular), 'the intended outcome is a property of the act itself' (*ibid.* 151). Consequently, an act of truly believing is better (and so more valuable) if it is performed with good motive, i.e. by an intellectually virtuous agent who is motivated by their love of truth as such. Thus, if we conceive of

---

[335] See also Greco 2010: 137, 180.

[336] For a similar account and invocation of Aristotle, see Sosa 2003: 174.

[337] Zagzebski's relation with the *Nicomachean Ethics* is admittedly much more engaged than that of either Greco's or Sosa's. See Zagzebski 1996.

knowledge in terms of acts, we can explain the value of knowledge (or, perhaps, know*ing*) in terms of the value of (intellectually) virtuous action.[338]

There is something unsatisfying about these explanations of the value of knowledge. In Greco's case, the value of knowledge is to be found in the fact that our believing truly is creditable to our virtuous cognitive characters. In this sense, knowledge is a certain sort of cognitive achievement and, as such, has final value.[339] For the sake of argument, let's suppose with Greco that the value of achievements is indeed final, such that this is a formal feature of the value of achievements. But what's the source of their value? Many achievements have no value beyond the satisfaction of having achieved them. For example, suppose that I have the goal of beating the current world record for the longest time balancing a spoon on one's nose. If I beat the record, this would be an achievement for me (and, perhaps, also in the eyes of some others). But the worth of this achievement is conditional on my wanting to achieve it and plausibly has no value beyond the satisfaction of my desire. Similarly, merely to claim that knowledge is an intellectual achievement says little about what's valuable about such achievements, i.e. in what sense they are achievements that are worthwhile and good. What's unsatisfying about Greco's account of the value of knowledge, then, is that it doesn't say enough: we need to know why manifesting epistemic virtue is a worthwhile achievement, such that it's valuable.[340]

Indeed, we might expect that Aristotle would level a similar criticism. In *Nicomachean Ethics* 1.12, Aristotle makes an exclusive distinction between things that are praiseworthy (ἐπαινετόν) and things that are honourable (τίμιον).[341] Praiseworthy things are praised because of their relation to some further good: 'everything that is praiseworthy is praised for being of a certain quality and for standing in a certain relation to something' (1101b12-14).[342] Aristotle offers the

---

[338] See also Zagzebski 2003.

[339] See also Greco 2009, Greco 2010: 97-98.

[340] Cf. Piller 2012: 218-220, Pritchard 2010: 45.

[341] See also Aufderheide 2015: 41.

[342] πᾶν τὸ ἐπαινετὸν τῷ ποιόν τι εἶναι καὶ πρός τι πῶς ἔχειν ἐπαινεῖσθαι

virtuous person as an example, who is praised because their nature is such that they both are of a certain quality and stand in a relation to 'something good and excellent' (ἀγαθόν τι καὶ σπουδαῖον, 1101b18-19). In particular, they are praised 'because of their actions and works' (1101b15-16).[343] Honourable things, on the other hand, are themselves best (ἄριστον). Consequently, it makes no sense to praise something that is honourable because, being best, there is no further good with reference to which it can be praised (1101b21-23). For example, gods are not praised but instead called blessed and happy. Similarly, we do not praise someone who is happy because happiness, unlike virtue, is itself divine and better (1101b25-27).

On Aristotle's view, then, virtue is indeed good, but it is not the source of its own goodness. This is made clear by the fact that we praise someone who is virtuous for the good actions that they perform: 'For praise is of virtue; for we are doers of fine actions from it' (1101b31-32).[344] Virtue is valuable because it makes us perform fine actions and perform them well. Similarly, if certain intellectual virtues are praiseworthy then they will be praiseworthy because they make us doers of fine intellectual activities. But what's the source of the goodness of virtuous intellectual activity? Aristotle's conclusion about happiness is telling:

> And it is clear to us from what we have said that happiness is among the honourable and final things. This also seems to hold because happiness is a starting point; for, we all do everything else [that we do] for its sake, and we postulate that the starting point and the cause of goods is something honourable and divine. (*EN* 1.12: 1101b35-1102a4)

> ἡμῖν δὲ δῆλον ἐκ τῶν εἰρημένων ὅτι ἐστὶν ἡ εὐδαιμονία τῶν τιμίων καὶ τελείων. ἔοικε δ' οὕτως ἔχειν καὶ διὰ τὸ εἶναι ἀρχή· ταύτης γὰρ χάριν τὰ λοιπὰ πάντα πάντες πράττομεν, τὴν ἀρχὴν δὲ καὶ τὸ αἴτιον τῶν ἀγαθῶν τίμιόν τι καὶ θεῖον τίθεμεν.

Happiness is something honourable and divine, but not only because there is nothing better than happiness to which it is related. In addition, happiness is that

---

[343] διὰ τὰς πράξεις καὶ τὰ ἔργα

[344] ὁ μὲν γὰρ ἔπαινος τῆς ἀρετῆς· πρακτικοὶ γὰρ τῶν καλῶν ἀπὸ ταύτης

for the sake of which everything else should be done, such that it is the starting point and cause of goods. So, if virtuous activity *is* happiness, then virtuous activity will be something honourable and the cause of other goods. And if it is the cause of other goods, we will be in a position to explain those goods, e.g. if knowledge is good then we will be able to explain its goodness by reference to virtuous activity. This is perhaps what Greco has in mind when he says that virtuous action 'is both intrinsically valuable and constitutive of the good life' (134). But this claim won't do on its own. The relationship between epistemically virtuous activity and the good life must be spelled out and argued for. On Aristotle's terms, if we are to explain the value of knowledge by invoking intellectual virtue, we must have an account of the relationship between intellectually virtuous activity and happiness. Or, more generally, an account of the relationship between intellectually virtuous activity and the source of its value. The mere claim that intellectually virtuous activity is an achievement will not do.

It's worth noting that Zagzebski is explicit about these concerns. In a later paper, Zagzebski argues that knowledge is an intellectually virtuous (and thus admirable) act of belief, which is creditable to the agent's good epistemic motives (Zagzebski 2003). Good epistemic motives 'confer value on the acts they motivate' and 'higher-order motives can confer value on the lower-order motives they motivate the agent to acquire' (23-24). Zagzebski thus suggests that we can understand the value of good epistemic motives in terms of the value of higher-order moral and prudential motives, e.g. if believing truly is important for acting morally, then the value of the motivation to act morally confers value on the motivation to believe truly. Similarly in the prudential case: the value of the motivation to act prudentially can confer value on the motivation to believe truly, if believing truly is important to acting prudentially. On this view, the value of knowledge flows from the value of the motive to believe truly, which in turn flows from the value of other, high-order motives, which ultimately flows from 'the motive to live a good life' (*ibid.* 24). In the end, then, Zagzebski claims that we must have recourse to 'a general account of eudaimonia, or a good life' in order to explain the value of epistemic virtue (*ibid.* 25-26). Without this it will be unclear why

believing virtuously will be a good thing. Zagzebski poses this worry in terms of a distinction between believing virtuously (and so admirably) and merely having the true beliefs we desire to have:

> Nobody is likely to dispute the claim that some true beliefs are desirable. What can be disputed is whether beliefs that are intellectually virtuous, either in the way I have described or in some other, are also components of a desirable life. The question Why should we want to have admirable beliefs? is really no different from the question Why should we want to do admirable acts? If virtuous acts are desirable, it is because it is more desirable to act in an admirable way. (Zagzebski 2003: 25)

Zagzebski thus notes that the challenge for virtue-theoretic accounts of the value of knowledge is to explain why virtuous activity is indeed constitutive of living well, such that virtuous and admirable activity is in fact both good and desirable. Perhaps it's correct to say, then, that knowledge is valuable because knowledge is an intellectually virtuous activity, but the goodness of such activity needs to be explained within and grounded upon a broader framework of value, e.g. in relation to living well, or to other sources of goodness. The onus is on virtue-theorists to give a plausible account of why virtuous activity is good.

Miranda Fricker applies a similar criticism to contemporary virtue-theoretic explanations of the value of knowledge. Focusing particularly on Zagzebski's motivation-based account, Fricker argues that:

> Credit accounts purport to explain the fact that we value knowledge by pointing to the value of this or that form of epistemic creditworthiness – on Zagzebski's view the credit that transfers in all cases of knowledge to render it admirable (even where the content fails to render it desirable) is owing to the good epistemic motive that helps transform true belief into knowledge. But the idea that we value knowledge because we value good epistemic motive gets the order of explanation back to front. We do not value knowledge because we value good epistemic motive. Rather, we value good epistemic motive because we value the knowledge it tends to get us. Indeed such a motive only constitutes a good epistemic motive because it aims at knowledge or truth or some other suitably ultimate epistemic end. (Fricker 2009: 125-126)

According to Fricker, good epistemic motives are indeed good, but they are not good in virtue of themselves. Rather, their goodness is derivative on what they aim at and tend to achieve, i.e. truth or knowledge (if they do indeed tend to achieve this). To suppose that good epistemic motives are independently valuable, such that they confer value on the true beliefs that result from them, is to mistakenly suppose that good epistemic motives are a source of value in their own right.

If these worries are correct, then we might conclude that recourse to epistemic virtue alone is insufficient to explain the value of knowledge, because epistemic virtue is not itself a source of value.[345] In addition, we must explain the source of epistemic virtue's value. But note that this is precisely what Aristotle offers. In the first case, Aristotle has a story to tell about why theoretically wise contemplation is an activity of complete or perfect happiness. And the value and goodness of contemplation (and virtuous activity in general) is argued for in relation to a general account of the nature of the human good, i.e. happiness, which is in turn described as the best good in relation to others, i.e. an end that is most complete, only chosen for its own sake and never for the sake of something else, that for the sake of which everything else is chosen, self-sufficient, etc. Even if we don't find this account plausible, Aristotle does at least provide a framework within which we are able to explain the value of virtuous epistemic activity. In the second case, Aristotle is committed to a view about value, such that certain objects of knowledge are better than others. As a consequence, the ultimate value of grasping the proper objects of theoretical wisdom wisely is found in the good, estimable, and divine nature of the objects of knowledge themselves. Again, we might not wish to follow Aristotle with this thought, but he at least provides us with an account of the value of epistemic virtue that is grounded upon a source of value. For Aristotle, then, the proper activities and objects of theoretical wisdom are of value, and the virtue of theoretical wisdom is that which transforms the proper activities and

---

[345] Dialectically speaking, this deals a more damaging blow for virtue-theoretic epistemologies, which have been motivated (at least in part) in order to solve the value problem, e.g. Zagzebski 2000.

objects of theoretical wisdom into something good for the knower. Theoretical wisdom is therefore valuable in virtue of its transformative nature – it is not itself a source of value.

One lesson we might take from Aristotle's account, then, is that it won't do merely to claim that virtuous actions performed virtuously are better than mere virtuous actions, or that true beliefs believed virtuously are better than mere true beliefs. In order to cogently explain the value of virtuous activity – be it practical or intellectual – we must provide an account of its source of value, i.e. in relation to other goods. Aristotle's account of the nature and value of knowledge thus puts contemporary virtue epistemologies into sharp relief, suggesting that recourse to virtue alone is insufficient for an explanation of epistemic value. Even if we want to resist the details of Aristotle's account, I submit that this structural lesson is of philosophical worth.

Bibliography

ANCIENT TEXTS

AESCHINES. *Eschine. Discours*, ed. V. Martin & G. de Budé. Vol 1. Les Belles Lettres, 1927.

ANTIPHON. *Antiphon. Discours*, ed. L. Gernet. Les Belles Lettres, 1923.

ARISTOTLE. *Analytica Priora et Posteriora*, ed. W.D. Ross. Clarendon Press, 1949.

—— *Ars Rhetorica*, ed. W.D. Ross. Clarendon Press, 1959.

—— *Categoriae et liber de Interpretatione*, ed. L. Minio-Paluello. Clarendon Press, 1949.

—— *De Anima.* ed. W.D. Ross. Clarendon Press, 1961.

—— *Ethica Eudemia*, ed. F. Susemihl. Teubner, 1884.

—— *Ethica Nicomachea*, ed. I. Bywater. Clarendon Press, 1894.

—— *Fragmenta Selecta*, ed. W.D. Ross. Clarendon Press, 1955.

—— *Les Parties des Animaux*, ed. P. Louis. Les Belles Lettres, 1956.

—— *Metaphysics*, ed. W.D. Ross. 2 vols. Clarendon Press, 1924.

—— *Physica*, ed. W.D. Ross. Clarendon Press, 1950.

—— *Politica*, ed. W.D. Ross. Clarendon Press, 1957.

—— *Protrepticus*, ed. D.S. Hutchinson & M.R. Johnson, 2017.

—— *Topica et Sophistici Elenchi*, ed. W.D. Ross. Clarendon Press, 1958.

EUCLID. *Euclidis Elementa*, ed. E.S. Stamatis (post J.L. Heiberg). 4 vols, 2nd ed. Teubner, 1969-1973.

GORGIAS. *Fragmenta Historicorum Graecorum*, ed. K. Müller. Didot, 1841-1870.

ISOCRATES. *Isocrate. Discours*, ed. G. Mathieu. Vol. 3. Les Belles Lettres, 1942.

PARMENIDES. *Die Fragmente der Vorsokratiker*, ed. H. Diels & W. Kranz. Vol 1, 6th ed. Weidmann, 1951.

PLATO. *Opera*, ed. J. Burnet. 5 vols. Clarendon Press, 1900-1907.

MODERN TEXTS

Ackrill, J.L. (1963) *Aristotle. Categories and De Interpretatione.* Oxford University Press.

—— (1973) Aristotle's Ethics. *Tijdschrift Voor Filosofie*, 35(3): 635-636.

—— (1974) 'Aristotle on *eudaimonia*', *Proceedings of the British Academy*, 60: 339-359.

—— (1978) 'Aristotle on Action', *Mind*, 87: 595-601.

—— (1981) 'Aristotle's theory of definition: some questions on *Posterior Analytics* II 8-10'. In E. Berti (ed.) *Aristotle on Science. The Posterior Analytics*. Antenore: 359-384.

Allen, J.V. (2015) 'Practical and theoretical knowledge in Aristotle'. In D. Henry & K.M. Nielsen (eds.) *Bridging the Gap Between Aristotle's Science and Ethics*: 49-70.

Angier, T. (2010) *Technē in Aristotle's Ethics: crafting the moral life*. Continuum.

Angioni, L. (2014) 'Aristotle on necessary principles and on explaining *x* rhrough *x*'s essence', *Studia Philosophica Estonica*, 7(2): 88-112.

—— (2016) 'Aristotle's definition of scientific knowledge', *Logical Analysis and History of Philosophy*, 19: 79-104.

Annas, J. (1990) 'Stoic epistemology'. In S. Everson (ed.) *Companions to Ancient Thought 1: epistemology*. Cambridge University Press: 184-203.

—— (1998) 'Virtue and eudaimonism', *Social Philosophy and Policy*, 15(1): 37-55.

Aufderheide, J. (2015) 'The content of happiness: a new case for *theôria*'. In J. Aufderheide & R.M. Bader (eds.) *The Highest Good in Aristotle and Kant*. Oxford University Press: 36-59.

—— (2016) 'Aristotle against Delos: pleasure in *Nicomachean Ethics* X', *Phronesis*, 61(3): 284-306.

—— (2017) 'Is Aristotle a virtue ethicist?' In V. Harte & R. Woolf (eds.) *Rereading Ancient Philosophy. Old chestnuts and sacred cows*. Cambridge University Press: 199-220.

—— (unpublished mss.) 'Commentary on *Nicomachean Ethics* Book 10'.

Aydede, M. (1998) 'Aristotle on *episteme* and *nous*: the *Posterior Analytics*', *Southern Journal of Philosophy*, 36(1): 15-46.

Baehr, J. (2009) 'Is there a value problem?'. In A. Haddock, A. Millar, & D. Pritchard (eds.) *Epistemic Value*. Oxford University Press: 42-59.

Baker, S.H. (2015) 'The concept of *ergon*: towards an achievement interpretation of Aristotle's "function argument"', *Oxford Studies in Ancient Philosophy*, 48: 227-266.

—— (2017) 'The metaphysics of goodness in the ethics of Aristotle', *Philosophical Studies*, 174(7): 1839-1856.

Balme, D.M. (1972) *Aristotle. De Partibus Animalium I and De Generatione Animalium I*. Clarendon Press.

Barnes, J. (1984) (ed.) *The Complete Works of Aristotle. The revised Oxford translation.* 2 vols. Princeton University Press.

—— (1994) *Aristotle. Posterior Analytics.* 2nd ed. Oxford University Press.

Barney, R. (2008) 'Aristotle's argument for a human function', *Oxford Studies in Ancient Philosophy*, 34: 293-322.

Berti, E. (2000) 'Unmoved mover(s) as efficient cause(s) in *Metaphysics* Λ 6'. In M. Frede & D. Charles (eds.) *Aristotle's Metaphysics Lambda. Symposium Aristotelicum.* Oxford University Press: 182-206.

—— (2012) 'The finality of Aristotle's unmoved mover in the *Metaphysics* book 12, chapters 7 and 10', *Nova et Vetera*, 10: 863-876.

Bjelde, J. (unpublished manuscript) 'Knowledge is teachable'.

Bodnár, I. (2005) 'Teleology across natures', *Rhizai. A Journal for Ancient Philosophy and Science*, 1: 9-29.

Bolton, R. (1976) 'Essentialism and semantic theory in Aristotle's *Posterior Analytics* II.7-10', *Philosophical Review*, 85: 515-545.

Bonitz, H. (1870) *Index Aristotelicus.* Berolini.

Bradshaw, D. (2001) 'A new look at the Prime Mover', *Journal of the History of Philosophy*, 39: 1-22.

Broadie, S. (1991) *Ethics with Aristotle.* Oxford University Press.

—— (2012) 'A science of first principles (*Metaphysics* A 2)'. In C. Steel (ed.) *Aristotle's Metaphysics Alpha. Symposium Aristotelicum. Edited by Carlos Steel with an edition of the Greek text by Oliver Primavesi.* Oxford University Press: 43-67.

—— (1993) 'Que Fait le Premier Moteur d'Aristote? Sur la théologie du livre Lambda de la *Métaphysique'*, *Philosophique de la France et de l'Étranger*, 183, 375-411.

Broadie, S. & C. Rowe (2002) *Aristotle. Nicomachean Ethics: translation, introduction, and commentary.* Oxford University Press.

Brogaard, B. (2007) 'Can virtue reliabilism explain the value of knowledge?', *Canadian Journal of Philosophy*, 36: 335-354.

Bronstein, D. (2016) *Aristotle on Knowledge and Learning. The Posterior Analytics.* Oxford University Press.

Brunschwig, J. (1999) 'Introduction: the beginnings of Hellenistic epistemology'. In K. Algra, J. Barnes, J. Mansfeld, M. Schofield (eds.) *The Cambridge History of Hellenistic Philosophy.* Cambridge University Press: 229-259.

Burnyeat, M.F. (1980) 'Socrates and the jury: paradoxes in Plato's distinction between knowledge and true belief, part I', *Proceedings of the Aristotelian Society Supplement*, 54: 173-191.

—— (1981) 'Aristotle on understanding knowledge'. In E. Berti (ed.) *Aristotle on Science. The Posterior Analytics*. Padova: Antenore, 97–140.

Buttaci, J.A. (2016) 'Thinking forms in images: Aristotle on intellectual capacities, activities, and virtues'. PhD thesis, University of Pittsburgh.

Charles, D. (1986) 'Aristotle: ontology and moral reasoning', *Oxford Studies in Ancient Philosophy*, 4 :119-144.

—— (1999) 'Aristotle on well-being and intellectual contemplation', *Proceedings of the Aristotelian Society, Supplementary Volumes*, 73: 205-223.

—— (2000) *Aristotle on Meaning and Essence*. Oxford University Press.

—— (2012) 'Teleological causation'. In C. Shields (ed.) *The Oxford Handbook of Aristotle*. Oxford University Press: 227-266.

—— (2015) 'Aristotle on practical and theoretical knowledge'. In D. Henry & K.M. Nielsen (eds.) *Bridging the Gap Between Aristotle's Science and Ethics*: 71-93.

—— (2017) 'Aristotle's Nicomachean function argument: some issues', *International Philosophical Inquiry*, 41(2-3): 95-104.

Charlton, D. (1985) 'Aristotle and the harmonia theory'. In A. Gotthelf (ed.) *Aristotle on Nature and Living Things: philosophical and historical studies*. Mathesis: 131-150.

Cooper, J.M. (1996) 'Reason, moral virtue, and moral value'. In J.M. Cooper (ed.) *Reason and Emotion: essays on ancient moral psychology and ethical theory*. Princeton University Press, 1999: 253-280.

—— (1997) (ed.) *Plato. Complete Works*. Hackett.

—— (2012) 'Conclusion – and retrospect (*Metaphysics* A 10)'. In C. Steel (ed.) *Aristotle's Metaphysics Alpha. Symposium Aristotelicum. Edited by Carlos Steel with an edition of the Greek text by Oliver Primavesi*. Oxford University Press: 335-364.

Côté-Bouchard, C. (2016) 'Can the aim of belief ground epistemic normativity?', *Philosophical Studies*, 173(12): 3181-3198

—— (2017) 'Is epistemic normativity value-based?', *Dialogue*, 56(3): 407-430.

DeMoss, D. & D. Devereux (1988) 'Essence, existence and nominal definition in Aristotle's *Posterior Analytics* II.8-10', *Phronesis*, 33: 133-154.

DePaul, M.R. (2001) 'Value monism in epistemology'. In M. Steup (ed.) *Knowledge, Truth, and Duty: Essays on Epistemic Justification, Responsibility, and Virtue*. Oxford University Press: 170-183.

Deslauriers, M. (2007) *Aristotle on Definition*. Brill.

Dow, J. (2014) 'Proof-reading Aristotle's *Rhetoric*', *Archiv für Geschichte der Philosophie*, 96(1): 1-37.

Duncombe, M. (2016) 'Thought as internal speech in Plato and Aristotle', *Logical Analysis and History of Philosophy*, 19: 105-125.

Dutant, J. (2014) 'In defence of swamping', *Thought*, 2: 357-366.

Elders, L. (1972) *Aristotle's Theology: a commentary on Book Λ of the Metaphysics*. Koninklijke van Gorcum.

Ferejohn, M. (2009). 'Empiricism and the first principles of Aristotelian science', In G. Anagnostopoulos (ed.) *A Companion to Aristotle*. Blackwell: 66-81.

—— (2013) *Formal Causes.* Oxford University Press.

Fine, G. (2004) 'Knowledge and true belief in the *Meno*', *Oxford Studies in Ancient Philosophy*, 27: 41-81.

—— (2010a) 'Aristotle on knowledge'. In F. Fronterotta (ed.). *La Scienza e le cause a partire dalla Meta sica di Aristotele.* Bibliopolis: 121-155.

—— (2010b) 'Aristotle's two worlds: knowledge and belief in *Posterior Analytics* 1.33', *Proceedings of the Aristotelian Society*, New Series 110: 323-346.

Foot, P. (1972) 'Morality as a system of hypothetical imperatives', *The Philosophical Review*, 81(3): 305-316.

Frede, M. (1996) 'Aristotle's rationalism'. In M. Frede & G. Striker (eds.) *Rationality in Greek Thought*. Oxford University Press: 157-173.

—— (2000a) 'Introduction'. In M. Frede & D. Charles (eds.) *Aristotle's Metaphysics Lambda. Symposium Aristotelicum*. Oxford University Press: 1-52.

—— (2000b) '*Metaphysics* Λ 1'. In M. Frede & D. Charles (eds.) *Aristotle's Metaphysics Lambda. Symposium Aristotelicum*. Oxford University Press: 53-80.

Fricker, M. (2009) 'The value of knowledge and the test of time', *Royal Institute of Philosophy Supplement*, 64: 121-138

Furley, D.J. (1985) 'The rainfall example in *Physics* ii 8'. In A. Gotthelf (ed.) *Aristotle on Nature and Living Things: philosophical and historical studies*. Mathesis Publications: 177-182.

Gasser-Wingate, M. (unpublished mss) 'Conviction, priority, and foundationalism in Aristotle's epistemology'.

Gelber, J. (2018) 'Two ways of being for an end', *Phronesis*, 63(1): 64-86.

Gifford, M. (2000) 'Lexical anomalies in the introduction to the *Posterior Analytics*, part I', *Oxford Studies in Ancient Philosophy*, 19: 163-223.

Goldin, O. (2013). 'Circular justification and explanation in Aristotle', *Phronesis*, 58: 195-214.

Goldman, A.I. (1976) 'Discrimination and perceptual knowledge', *The Journal of Philosophy*, 73(20): 771-791.

Gotthelf, A. (1988) 'The place of the good in Aristotle's natural teleology', *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 4: 113-139.

—— (2012) *Teleology, First Principles, and Scientific Method in Aristotle's Biology*. Oxford University Press.

Gottlieb, P. (1991) 'Aristotle and Protagoras: the good human being as the measure of goods', *Apeiron*, 24: 25-46.

Greco, J. (2002) 'Knowledge as credit for true belief'. In M. DePaul & L. Zagzebski (eds.) *Intellectual Virtue: perspectives from ethics and epistemology*. Oxford University Press: 111-134.

—— (2009) 'The value problem'. In A. Haddock, A. Millar, & D. Pritchard (eds.) *Epistemic Value*. Oxford University Press: 313-321.

—— (2010) *Achieving Knowledge.* Cambridge University Press.

Greenwood, L.H.G. (1909) *Aristotle. Nicomachean Ethics. Book Six. With essays, notes, and translations.* Cambridge University Press.

Gregoric, P. (2001) 'The Heraclitus anecdote: *De Partibus Animalium* i 5.645a17-23', *Ancient Philosophy*, 21: 1-13.

Gregoric, P. & F. Grgic (2006). 'Aristotle's notion of experience', *Archiv für Geschichte der Philosophie*, 88: 1-30.

Hampson, M.R. (2017) 'Enacting virtue'. PhD thesis, University College London.

Hardie, W.F.R. (1967) 'The final good in Aristotle's *Ethics*', *Philosophy*, 40: 277-295.

—— (1968) *Aristotle's Ethical Theory*. Clarendon Press.

Harte, V. (forthcoming) 'Plato's *Philebus* and some "value of knowledge" problems', *Proceedings of the Joint Session of the Aristotelian Society and the Mind Association.*

Hasper, P.S. (2006) 'Sources of Delusion in Analytica Posteriora 1.5', Phronesis, 51(3): 252-284

Hasper, P.S. & J. Yurdin (2014) 'Between perception and scientific knowledge: Aristotle's account of experience', *Oxford Studies in Ancient Philosophy*, 47:119-150.

Heinaman, R. (1996) 'Activity and praxis in Aristotle', *Proceedings of the Boston Area Colloquium in Philosophy*, 12: 71-111.

Henry, D. (2015a) 'Holding for the most part: the demonstrability of moral facts'. In D. Henry & K.M. Nielsen (eds.) *Bridging the Gap Between Aristotle's Science and Ethics*: 169-189.

—— (2015b) 'Aristotle on the cosmological significance of biological generation'. In D. Ebrey (ed.) *Theory and Practice in Aristotle's Natural Science*. Cambridge University Press: 100-118.

Hirji, S. (forthcoming-a) 'What's Aristotelian about neo-Aristotelian virtue ethics?', *Philosophy and Phenomenological Research*.

—— (forthcoming-b) 'Acting virtuously as an end in Aristotle's ethics', *British Journal of the History of Philosophy*.

Hursthouse, R. (1995) 'The virtuous person's reasons: a reply to Bernard Williams'. In R. Heinaman (ed.) *Aristotle and Moral Realism*. Westview Press: 24-33.

Irwin, T. (1977) 'Aristotle's discovery of metaphysics', *Review of Metaphysics*, 31: 210-229.

—— (1988). *Aristotle's First Principles*. Oxford University Press.

—— (1999) *Aristotle: The Nicomachean Ethics*. 2nd ed. Hackett.

—— (2010) 'The sense and reference of *kalon* in Aristotle', *Classical Philology*, 105: 381-402.

Jiminez, M. (2016) 'Aristotle on becoming virtuous by doing virtuous actions', *Phronesis*, 61(1): 3-32.

Joachim, H.H. (1951) *Aristotle. The Nicomachean Ethics: a commentary*, ed. D.A. Rees. Clarendon Press.

Johansen, T.K. (2017) 'Aristotle on the *logos* of the craftsman', *Phronesis*, 62: 97-135

Johnson, M.R. (2005) *Aristotle on Teleology*. Oxford University Press.

Judson, L. (1994) 'Heavenly motion and the unmoved mover'. In. M. L. Gill and J. G. Lennox (eds.) *Self-Motion: from Aristotle to Newton*. Princeton University Press: 155-171.

—— (2005) 'Aristotelian Teleology', *Oxford Studies in Ancient Philosophy*, 29: 341–366.

—— (2018) 'First philosophy in *Metaphysics* Λ', *Oxford Studies in Ancient Philosophy*, 54: 227-227.

Kahn, C.H. (1985) 'The place of the prime mover in Aristotle's teleology'. In A. Gotthelf (ed.) *Aristotle on Nature and Living Things: philosophical and historical studies*. Mathesis Publications: 183-205.

Kirk, G.S., J.E. Raven, & M. Schofield (1983) *The Presocratic Philosophers*. 2nd ed. Cambridge University press.

Korsgaard, C. (1986) 'Aristotle and Kant on the source of value', *Ethics*, 96(3): 486-505.

Kosman, A. (1973) 'Understanding, explanation, and insight in Aristotle's *Posterior Analytics*'. In E.N. Lee, A.P.D. Mourelatos, & R.M. Rorty (eds.) *Exegesis and Argument*. Van Gorcum, 374-392.

—— (1994) 'Aristotle's Prime Mover'. In. M. L. Gill and J. G. Lennox (eds.) *Self-Motion: from Aristotle to Newton*. Princeton University Press: 135-153.

Kraut, R. (1976) 'Aristotle on choosing virtue for itself', *Archiv für Geschichte der Philosophie*, 58(3): 223-239.

—— (1989) *Aristotle on the Human Good*. Princeton University Press.

Kullmann, W. (1985) 'Different conceptions of the final cause in Aristotle'. In A. Gotthelf (ed.) *Aristotle on Nature and Living Things: philosophical and historical studies*. Mathesis Publications: 169-174.

Kvanvig, L. (2003) *The Value of Knowledge and the Pursuit of Understanding*. Cambridge University Press.

LaBarge, S. (2006) 'Aristotle on *empeiria*', *Ancient Philosophy*, 26(1): 23-34.

Lawrence, G. (2011) 'Acquiring character: becoming grown-up'. In M. Pakaluk & G. Pearson (eds.) *Moral Psychology and Human Action in Aristotle*. Oxford University Press: 233-283.

Lennox, J.G. (1987) 'Divide and Explain: the *Posterior Analytics* in Practice'. In A. Gotthelf & J.G. Lennox (eds.) *Philosophical Issues in Aristotle's Biology*. Cambridge University Press: 90-119.

—— (2001a) *Aristotle. On the Parts of Animals I-IV*. Clarendon Press.

—— (2001b) *Aristotle's Philosophy of Biology: Studies in the Origins of Life Science*. Cambridge University Press.

—— (2011) 'Aristotle on norms of inquiry', *HOPOS: the journal of the international society for the history of philosophy of science*, 1(1): 23-46.

Lesher, J.H. (1973) 'The meaning of ΝΟΥΣ in the Posterior Analytics', *Phronesis*, 18(1): 44-68.

—— (2001) 'On Aristotelian ἐπιστήμη as understanding', *Ancient Philosophy*, 21: 45-55.

—— (2010) 'Saphêneia in Aristotle: clarity, precision, and knowledge', *Apeiron*, 43: 143-56.

—— (2012) 'Aristotle's considered view of the path to knowledge'. In M.D. Boeri & N. Ooms (eds.) *El espíritu y la letra. Un homenaje a Alfonso Gómez-Lobo*. Ediciones Colihue: 127-145

Leunissen, M. (2010) *Explanation and Teleology in Aristotle's Science of Nature*. Cambridge University Press.

Liddell, H.G. & R. Scott. (1996) *A Greek English Lexicon. Revised and augmented throughout by Sir Henry Stuart Jones with the assistance of Roderick McKenzie. With a revised supplement*. 9th ed. Clarendon Press.

Lloyd, A.C. (1976) 'The principle that the cause is greater than its effects', *Phronesis*, 21: 146-156.

MacDonald, S. (1989) 'Aristotle and the homonymy of the good', *Archiv für Geschichte der Philosophie*, 71(2): 150-174.

Makin, S. (2003) 'What does Aristotle mean by priority in substance?', *Oxford Studies in Ancient Philosophy*, 24: 209-238.

—— (2006). *Aristotle. Metaphysics Book Θ*. Oxford University Press.

Matthen, M. (1981) 'The structure of Aristotelian science'. In M. Matthen (ed.) *Aristotle Today: essays on Aristotle's ideal of science*. Academic Printing & Publishing: 1-23.

McCabe, M.M. (1994) 'Persistent fallacies', *Proceedings of the Aristotelian Society*, 94(1): 73-93.

—— (2009) 'Escaping one's own notice knowing: Meno's paradox again', *Proceedings of the Aristotelian Society*, 109(3): 233-256.

McCready-Flora, I.C. (2013) 'Aristotle and the normativity of belief', *Oxford Studies in Ancient Philosophy*, 44: 67-98.

McKirahan, R. (1992) *Principles and Proofs. Aristotle's Theory of Demonstrative Science*. Princeton University Press.

Menn, S. (1992) 'Aristotle and Plato on god as *nous* and as the good'. *Review of Metaphysics*, 45: 543-73.

—— (2012) 'Aristotle's theology'. In C. Shields (ed.) *The Oxford Handbook of Aristotle*. Oxford University Press: 422-464.

Meyer, S.S. (2016) 'Aristotle on moral motivation'. In I. Vasiliou (ed.) *Moral Motivation. A history*. Oxford University Press: 44-65.

Modrak, D. (2010) 'Nominal definition in Aristotle'. In D. Charles (ed.) *Definition in Greek Philosophy*. Oxford University Press: 252-285.

Morison, B. (forthcoming) 'Aristotle on the distinction between what is understood and what is believed'. In G. Salmieri (ed.) *Knowing and Coming to Know: Essays on Aristotle's Epistemology*. University of Pittsburgh Press.

Moss, J. (2012) *Aristotle on the Apparent Good. Perception, Phantasia, Thought, and Desire.* Oxford University Press.

Moss, J. & W. Schwab (forthcoming) 'The birth of belief', *Journal of the History of Philosophy.*

Müller, J. (2018) 'Practical and productive thinking in Aristotle', *Phronesis*, 63(2): 148-175.

Nagel, J. (2007) 'Epistemic intuitions', *Philosophy Compass*, 2(6): 792-819.

Nightingale, A. (2004) *Spectacles of Truth in Classical Greek Philosophy. Theoria in its cultural context*. Cambridge University Press.

Olson, R.G. (1967) 'The good'. In P. Edwards (ed.) *Encyclopedia of Philosophy*. Vol 3. MacMillan and Freepress.

Olsson, E.J. (2011) 'The value of knowledge', *Philosophy Compass*, 6(12): 874-883.

Parfit, D. (2011) *On What Matters*. Oxford University Press.

Pasnau, R. (2013) 'Epistemology idealized', *Mind*, 122: 987-1021.

Pellegrin, P. (2010) 'Definition in Aristotle's *Posterior Analytics*'. In J. Lennox & R. Bolton (ed.) *Being, Nature, and Life in Aristotle: Essays in Honor of Allan Gotthelf*. Cambridge: Cambridge University Press: 122-146.

Peramatzis, M. (2010) 'Essence and Per Se Predication in Aristotle's Metaphysics Z.4', Oxford Studies in Ancient Philosophy, 39: 121-182.

—— (2011) *Priority in Aristotle's Metaphysics*. Oxford University Press.

—— (forthcoming) 'Aristotle on knowledge and belief: *Posterior Analytics* 1.33'. In G. Salmieri (ed.) *Knowing and Coming to Know: Essays on Aristotle's Epistemology*. University of Pittsburgh Press.

Perin, C. (2012) 'Knowledge, stability, and virtue in the *Meno*', *Ancient Philosophy*, 32: 15-34.

Piller, C. (2012) 'Knowledge as achievement – Greco's double mistake'. In C. Jaeger & W. Loeffler (eds.) *Epistemology: Contexts, Values Disagreement.* Ontos Verlag: 213-223.

Pritchard, D. (2010) 'Knowledge and understanding'. In D. Pritchard, A. Millar, & A. Haddock (ed.) *The Nature and Value of Knowledge. Three investigations*. Oxford University Press: 3-88.

—— (2011) 'What is the Swamping Problem?' In A. Reisner & A. Steglich-Petersen (eds.) *Reasons for Belief*. Cambridge University Press: 244-259.

Reeve, C.D.C. (1994) *Aristotle. Politics*. Hackett.

—— (2014). *Aristotle. Nicomachean Ethics. Translated with introduction and notes*. Hackett.

—— (2016) *Aristotle. Metaphysics*. Hackett.

Richardson Lear, G. (2004) *Happy Lives and the Highest Good. An essay on Aristotle's Nicomachean Ethics*. Princeton University Press.

—— (2006) 'Aristotle on moral virtue and the fine'. In R. Kraut (ed.) *The Blackwell Guide to Aristotle's Nicomachean Ethics*. Blackwell: 116-136.

Roochnik, D. (2009) 'What is *theoria*? *Nicomachean Ethics* 10.7-8', *Classical Philology*, 104: 69-82.

Ross, A. (2016) 'The causality of the prime mover in *Metaphysics* Λ'. In C. Horn (ed.) *Aristotle's Metaphysics Lambda – new essays*. De Gruyter: 207-228.

Salmieri, G., D. Bronstein, D. Charles, & J.G. Lennox (2014) '*Episteme*, demonstration, and explanation: a fresh look at Aristotle's *Posterior Analytics*', *Metascience*, 23: 1-35.

Sartwell, C. (1992) 'Why knowledge is merely true belief', *The Journal of Philosophy*, 89(4): 167-180.

Schiaparelli, A. (2011) 'Epistemological problems in Aristotle's concept of definition: *Topics* vi.4', *Ancient Philosophy*, 31(1): 127-143.

Schreiber, S.G. (2003) A*ristotle on False Reasoning. Language and the world in the Sophistical Refutations*. State University of New York Press.

Schwab, W. (2015) 'Explanation in the epistemology of the *Meno*', *Oxford Studies in Ancient Philosophy*, 48: 1-36.

Scott, D. (1999) 'Aristotle on well-being and intellectual contemplation', *Proceedings of the Aristotelian Society, Supplementary Volumes*, 73: 225-242.

—— (2006) *Plato's Meno*. Cambridge University Press.

Sedley, D. (1991) 'Is Aristotle's teleology anthropocentric?' *Phronesis*, 36: 179–196.

—— (2000) '*Metaphysics* Λ 10'. In M. Frede & D. Charles (eds.) *Aristotle's Metaphysics Lambda. Symposium Aristotelicum*. Oxford University Press: 327-350.

Sharples, R.W. (1985) *Plato: Meno*. Aris & Phillips.

Shields, C. (1999) *Order in Multiplicity: homonymy in the philosophy of Aristotle.* Oxford University Press.

—— (2012) 'Being *qua* being'. In C. Shields (ed.) *The Oxford Handbook of Aristotle.* Oxford University Press: 343-371.

—— (2014) 'Goodness is meant in many ways'. In J. Hardy & G. Rudebusch (eds.) *Ancient Ethics.* V&R: 243-257.

—— (2016) *Aristotle. De Anima*. Oxford University Press.

Sorabji, R. (1981) 'Definitions: why necessary and in what way?'. In E. Berti (ed.) *Aristotle on Science. The Posterior Analytics*. Antenore: 205-44.

Sosa, E. (2003). 'The place of truth in epistemology'. In M. DePaul & L. Zagzebski (eds.) *Intellectual Virtue: perspectives from ethics and epistemology*. Oxford University Press: 155-179.

Sprague, R.K. (1972) (ed.) *The Older Sophists. A complete translation by several hands of the fragments in Die Fragmente Der Vorsokratiker, edited by Diels-Kranz. With a new edition of Antiphon and of Euthydemus.* Hackett.

Stanley, J. (2008) 'Knowledge and certainty', *Philosophical* Issues, 18(1): 35-57.

Steglich-Petersen, A. (2011) 'How to be a teleologist about epistemic reasons'. In A. Steglich-Petersen & A. Reisner (eds.) *Reasons for Belief*. Cambridge University Press: 13-33.

Stewart, J.A. (1892) *Notes on the Nicomachean Ethics of* Aristotle. Vol. 1. Clarendon Press.

Striker, G. (1990) 'The problem of the criterion'. In S. Everson (ed.) *Companions to Ancient Thought 1: epistemology*. Cambridge University Press: 143-160.

Taylor, C.C.W. (1990) 'Aristotle's epistemology'. In S. Everson (ed.) *Epistemology. Companions to ancient thought: 1*. Cambridge University Press: 121-145.

—— (2006) *Aristotle. Nicomachean Ethics Books II-IV. Translated with a commentary by C.C.W. Taylor*. Oxford University Press.

Tierney, R. (2001) 'Aristotle's scientific demonstrations as expositions of essence', *Oxford Studies in Ancient Philosophy*, 20: 149-70.

Tor, S. (2015) 'Parmenides' epistemology and the two parts of his poem', *Phronesis*, 60(1): 3-39.

Tuominen, M. (2015) 'Naturalised versus normative epistemology: an Aristotelian alternative'. In M. Tuominen, S. Heinämaa, & V. Mäkinen (eds.) *New Perspectives on Aristotelianism and its Critics*. Brill: 66-91.

Vasiliou, I. (2007) 'Virtue and argument in Aristotle's ethics'. In S. Tenenbaum (ed.) *New Trends in Philosophy: moral psychology*. Brill: 37-78.

—— (2011) 'Aristotle, agents, and actions'. In J. Miller (ed.) *Aristotle's Nicomachean Ethics: a critical guide*. Cambridge University Press: 170-190.

Vlastos, G. (1985) 'Socrates' disavowal of knowledge', *The Philosophical Quarterly*, 35(138): 1-31.

Vogt, K. (2012) *Belief and truth: a skeptic reading of Plato*. Oxford University Press.

Warren, J. (2014) *The Pleasures of Reason in Plato, Aristotle, and the Hellenistic Hedonists*. Cambridge University Press.

Whiting, J. (2002) 'Eudaimonia, external results, and choosing virtuous actions for themselves', *Philosophy and Phenomenological Research*, 65(2): 270-290.

Williams, B. (1995) 'Acting as the virtuous person acts'. In R. Heinaman (ed.) *Aristotle and Moral Realism*. Westview Press: 13-23.

Williamson, T. (2000) *Knowledge and its Limits.* Oxford University Press.

Zagzebski, L. (1996) *Virtues of the Mind. An inquiry into the nature of virtue and the ethical foundations of knowledge*. Cambridge University Press.

—— (2000). 'From reliabilism to virtue epistemology'. In G. Axtell (ed.) *Knowledge, Belief, and Character*. Rowman and Littlefield.

—— (2003) 'The search for the source of the epistemic good', *Metaphilosophy*, 34(1-2): 12-28.

—— (2004) 'Epistemic value monism'. In J. Greco (ed.) *Ernest Sosa and his Critics*. Wiley-Blackwell: 190-198.